

The Institute for Research on Public Policy

VOLUME I

A CONCEPTUAL OVERVIEW OF TAX REFORM OPTIONS

OPEN TO NEW BRUNSWICK

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JUNE, 1987

FOREWORD

The tax system evolves over time in response to Government's need for revenue and as changing social and economic circumstances dictate. Unlike the expenditure budget, the Legislature does not annually review and approve the tax system in all its detail. Since the tax system is the result of many Government decisions over a long period of time, it is appropriate to occasionally consider the system in its entirety.

This Review of the New Brunswick Tax system provides a thoughtful consideration of taxation in New Brunswick. In addition to many useful observations it contains specific recommendations for reform.

The recommendations are not ones with which the Government necessarily agrees or disagrees. The Government views them as a starting point for public debate.

The recommendations recognize the financial reality that tax changes must not increase the deficit. Consequently, a list of possible tax increases is offered to offset recommendations that, if adopted, would reduce revenues.

Volume I of the Review provides a conceptual overview of the tax reform options open to New Brunswick drawing on the extensive economic literature on the subject of taxation. Volume II focusses more directly on tax issues in New Brunswick. It is this volume that contains recommendations for reform. Chapter XIII of Volume II contains a summary of the Review and its findings.

Volume I is totally the work of the Institute for Research on Public Policy. The main body of Volume II is also their work. However, the Institute was able to draw on the research of the Coopers and Lybrand Consulting Group concerning the impact of selected tax changes on a cross section of provincial industry. The complete Coopers and Lybrand study is appended to Volume II.

I am pleased this research has led to specific recommendations and has confronted the difficult, real world, trade offs between desirable tax concessions and difficult tax increases. The recommendations will aid greatly in the forthcoming public debate, not only concerning reforms to the New Brunswick tax system, but also concerning the provincial response to federal reforms.

Honourable John B.M. Baxter, Q.C.
Minister of Finance

NEW BRUNSWICK TAX REFORM OPTIONS

Acknowledgement

We would like to extend our sincere appreciation to the many people who have assisted us in preparing this report. Rod Hill, John Mitsopulos, and Professor Brendan Murphy conducted surveys of the literature, drafted parts of the document, and compiled tables. Earlier drafts were reviewed by Professors Donald Brean, Neil Bruce, John Earl, Donald McCharles and John Whalley. Their criticisms and suggestions have been extremely helpful. Civil servants within New Brunswick's Ministry of Finance provided data and useful comments. Heather Winship and John Mitsopulos typed the manuscripts. While retaining responsibility for errors and misinterpretations, we acknowledge and appreciate the assistance and encouragement generously provided by all of these people.

We have provided two versions of our document: a 225 page version with extensive literature references and data; and a 72 page summary of the issues. Chapter numbers and titles are consistent throughout these two versions, so that a reader of the short version can easily refer to the detailed, long version for additional information on any topic of particular interest to him or her.

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CHAPTER 1

An Introductory Overview

1. Introduction

In this document, we evaluate New Brunswick's tax reform options. This evaluation is based on the large body of literature addressing the economic impact of taxes. The process of tax reform involves more than economic analyses, however. It also involves judgements about trade-offs among competing social objectives. We refer extensively to the U.S. and Canadian tax reform debates so as to provide illustrations of these trade-offs and explore the likely implications of some of the measures proposed.

Recent years have witnessed an increasing public concern about efficiency and growth. A number of developments have stimulated this concern. Newly industrialized countries are challenging the international competitiveness of Canada's established economic activities, not only in manufactured goods but also in natural resource products. Since the mid-1970's, a slowdown has occurred in Canada's productivity and wage increases. Of most political significance, perhaps, unemployment rates have risen sharply and have stayed at unacceptably high levels.

Public concerns about the increasing international competition, the slowdown in productivity and wage increases, and the rise in unemployment rates have led some observers to

advocate a shift in tax objectives towards less emphasis on equity issues, and more emphasis on efficiency and growth. Our document investigates this issue and its implications for tax reform. New Brunswick's residents have suffered recent economic hardships to a greater degree than have other regions in Canada. Consequently, tax reform must give special attention to the objectives of improving efficiency and stimulating economic growth so as to create jobs and raise incomes.

Throughout this document, great importance is attached to the interactions between New Brunswick's tax system and the tax systems of the other jurisdictions with which it has economic relationships. For New Brunswick, the export and import of goods and services form an essential component of economic activity. It is also true that both capital and labour can flow relatively freely across New Brunswick's borders. The New Brunswick tax system can alter these flows of goods, services, capital and labour. Consequently, in evaluating reform options, the impact of alternative taxes on these flows must be a central concern.

New Brunswick's tax collection agreement with the federal government effectively limits the province's scope to alter its personal or corporate tax bases or the progressivity of its statutory rates. Therefore, it is essential for New Brunswick to participate actively in the upcoming federal tax reform debate. New Brunswick's tax bases, the progressivity of its rate structure and, in fact, the revenue levels it can derive from its present tax system - all these could be dramatically altered by current federal reform proposals. It is important to note that New Brunswick has the constitutional right to opt out of the tax

collection agreement. However, we have been instructed to discuss New Brunswick's tax reform options within that agreement. We have interpreted this to include the possibility of modifying the agreement, and we do provide recommendations for such modifications.

New Brunswick also has the power to institute significant reform within areas of its own responsibility. In particular, New Brunswick can alter the relative share of its revenue coming from each of its taxes. This choice of tax mix is an issue that receives special consideration in our document. As opposed to other provinces, New Brunswick has chosen not to levy user fees for health care, it has kept education tuition fees at a low level, and it has not instituted payroll taxes. Capital taxes have not been levied except for the 1987 budget provision for capital taxes on financial institutions. Our document sheds light on possible New Brunswick tax changes in these areas as well.

2. The New Brunswick Economy: Special Features

* The Need to Create New Employment Opportunities

New Brunswick's unemployment rate in 1971 was 6.1 percent. By 1976, this had risen sharply to 11.0 percent, and in recent years it has climbed as high as 14.9 percent. Faced with relatively few employment opportunities, many have decided not to seek employment. This labour situation contrasts with the experience of Canada as a whole. The nation's unemployment rate has remained consistently lower than New Brunswick's.

New Brunswick's gross domestic product per capita has long been stuck at a low level compared with the rest of Canada. In 1965, New Brunswick's gross domestic product per capita was 62.1 percent of the national average; by 1979, this ratio had risen only slightly to 63.7 percent. Any element of tax reform that would enable the province to climb towards the national average in regard to unemployment rates, participation rates, and gross domestic product per capita, would therefore be particularly welcome.

* Close Economic Relationships with Other Jurisdictions

In 1986, federal grants to New Brunswick totalled \$1.2 billion. The New Brunswick government's own source revenues for 1986 are estimated at approximately \$1.5 billion. This represents a very heavy reliance on the fiscal equalization program, the established programs financing, and federal contributions to welfare and education. Clearly, any federal reforms that might affect these could seriously impact the New Brunswick government's finances.

Within the New Brunswick tax system, there is also a very heavy reliance on taxes that are collected and administered by the federal government. In 1986, the personal income tax revenue of \$381.9 million and the corporate income tax revenue of \$79.6 million, comprised over 35 percent of total New Brunswick taxes.

Net migration data for New Brunswick over the past 15 years clearly indicate the sensitivity of the labour force to changes in economic activity both inside and outside of the province.

While many factors influence migration decisions, taxes may be a significant element among the economic determinants.

Finally, New Brunswick relies heavily on natural resource exports which must compete in markets where many other nations offer similar goods. This aspect is extremely important in considering tax reform options. It suggests that many New Brunswick exporters have minimal ability to pass any tax increases on to their customers. Rather, any tax increases would ultimately be largely absorbed by resident factors of production.

3. A Comparison of the New Brunswick Tax System with Tax Systems in other Provinces

The choice of tax mix varies greatly among Canadian provinces. And for several provinces, it has varied greatly over the fifteen year period, 1970-71 to 1985-86. For example, the share of total revenue obtained from the personal income tax has varied from a low of 4.6 percent in Prince Edward Island in 1970-71 to a high of 27.0 percent in Quebec in 1985-86. The share of total revenue obtained from retail sales taxes (including tobacco) has varied from a low of 0.7 percent in Alberta in 1985-1986 to a high of 19.3 percent in Ontario in 1985-1986.

Within New Brunswick, we can see significant shifts over the fifteen year period. As a share of total provincial revenue, the personal income tax rose from 9.8 percent in 1970-71 to 14.6 percent in 1985-86. Meanwhile, the property tax fell from 6.5 percent of total revenue to 4.1 percent. And the retail sales tax rose from 15.5 percent to 17.3 percent.

One of the options available to New Brunswick in the context of tax reform is that of altering the share of its total revenue obtained from each type of tax. From this perspective, it is therefore important to examine carefully the impacts of each type of tax and assess how these can be used most efficiently in pursuing various economic objectives. We hope to clarify the advantages and disadvantages of each type of tax, so as to facilitate the debate over this important issue of the appropriate tax mix.

TABLE 1.3

Sources of Total Gross General Provincial Revenue, Fiscal Year 1970-71

(% of total revenue, including transfers from other levels of government)

Sources	NT/D	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Personal Income Tax	6.9	4.6	9.7	9.8	24.4	18.1	19.3	12.9	16.1	17.6	18.5
Corporation Income	2.7	1.3	2.6	2.1	4.6	9.1	5.8	3.4	5.4	5.8	6.2
Sales*	12.3	11.1	14.8	15.5	18.7	15.8	13.8	13.0	1.3	16.0	15.2
Motive Fuel	6.2	7.0	8.6	7.1	7.9	8.3	7.8	9.1	7.9	6.2	7.9
Hospitalization Insurance and Medicine Premiums	--	--	--	--	0.8	12.4	5.1	3.4	4.8	5.9	6.1
Succession duties	--	--	--	--	1.2	1.5	--	--	--	1.4	1.0
Other tax Revenue**	0.6	0.2	0.4	0.4	1.9	0.5	0.9	0.6	0.8	0.5	0.9
Permits Privileges, Licenses	3.8	2.2	3.4	4.6	6.1	6.3	4.7	10.8	29.8	16.5	8.9
Other Own-Source Revenue***	5.7	12.1	13.3	13.1	5.2	10.9	9.6	18.3	10.5	12.6	9.7
Total Unconditional Transfers	29.1	27.9	21.4	20.4	20.2	0.8	8.4	8.1	1.8	0.1	9.1

...continued...

TABLE 1.3 (continued)

Sources of Total Gross Provincial Revenue, Fiscal Year 1970-71

(% of total revenue, including transfers from other levels of government)

Sources	NTLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Total											
Conditional Transfers	33.2	33.6	25.6	26.9	9.0	16.5	23.7	20.4	21.6	17.5	1.5

Source: Calculations from - Provincial and Municipal Finances, 1970-71. Table 3-1, p. 26. Canadian Tax Foundation, Toronto, 1972.

*Provinces differ in the diversion of property tax revenue between provincial and municipal government

**including tobacco

***including corporation (non-income) - except Ontario

*Note: Property tax is included in "other non-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

TABLE 1.4

Sources of Gross General Provincial Revenue, Fiscal Year 1985-86*

(% of total revenue, including transfers from other levels of government)

Sources	MFLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Personal Income Tax	11.8	11.5	19.1	14.6	27.0	25.7	17.4	16.6	11.3	19.9	21.7
Corporation Income	2.6	1.7	2.9	3.1	1.6	7.0	3.3	3.4	4.9	3.1	4.0
Sales**	17.4	16.2	17.0	17.3	12.3	19.3	12.7	11.5	0.7	15.9	13.3
Motive Fuel	3.1	3.4	4.3	4.1	3.5	4.1	4.4	0.8	0.03	4.2	3.2
Health Insurance Premiums and Taxes	--	--	--	--	5.1	5.6	--	--	1.4	3.3	3.7
Social Insurance levies	1.4	1.0	1.2	1.7	2.5	3.5	1.1	1.9	1.8	4.6	2.7
Other tax Revenue	1.0	0.7	0.7	0.6	3.8	2.8	5.6	3.3	0.8	1.8	2.7
Permits Privileges, Licenses	2.7	1.6	1.6	1.4	2.8	2.7	1.1	1.7	0.9	2.2	2.2
Natural Resource Revenues	1.4	0.3	0.6	0.9	0.4	0.8	1.8	18.2	38.5	7.1	7.3
Liquor Board Profits	1.7	2.1	3.6	2.5	1.2	2.2	3.4	2.2	2.2	3.1	2.1
Return on Investments	7.4	8.5	6.8	4.5	9.6	6.7	11.5	18.8	23.0	8.3	10.7

...continued...

TABLE 1.4 (continued)

Sources of Gross General Provincial Revenue, Fiscal Year 1985-86*

(% of total revenue, including transfers from other levels of government)

Sources	MTL	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Sales of Goods and Services	2.7	3.1	3.7	1.3	1.7	2.0	5.0	3.6	1.3	2.9	2.2
Other Own-Source Revenue***	0.5	3.9	0.2	4.2	7.3	1.0	5.6	0.6	3.2	6.3	3.9
Total Unconditional Transfers	29.2	29.4	20.7	23.7	9.1	0.6	12.7	0.7	1.5	0.3	6.2
Total Conditional Transfers***	17.3	16.9	17.9	19.9	12.2	15.8	14.3	16.8	8.5	17.0	14.0

Source: CANSIM MATRICES 2751-63, April 23, 1987.

*Current and capital income combined

**including tobacco and alcoholic beverages excise taxes

***includes contributions to pension plans - including the Quebec Pension Plan

****includes transfers from municipal governments

*Note: Property tax is included in "other own-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

CHAPTER 2

The Objectives of Equity, Efficiency, and Simplicity

1. Introduction

In the past, it has generally been agreed that there are three major objectives or criteria to be considered in evaluating a particular tax or tax system. These are equity, efficiency and simplicity. One problem is that these objectives are not necessarily compatible with one another. Although it is recognized that there are usually trade-offs between these, there is no clear consensus as to the severity of these trade-offs. Consequently, the order of priority assigned to these objectives remains somewhat arbitrary and likely to vary with the circumstances at hand. Also the fact that governments use the tax system not only to collect revenue and redistribute income but also to promote economic growth complicates the issue even further.

2. Equity

Equity involves a comparison of how a certain tax affects the well-being of a specific individual versus another. There are two aspects of equity. Horizontal equity goals are met when taxpayers with equal "ability to pay" bear the same tax burden. Vertical equity on the other hand concerns the relative tax

treatment that should be given to taxpayers with different levels of "ability to pay".

Equity requires the use of some universally accepted measure of "well-being" or "ability to pay" in order to make comparisons between taxpayers. It is usually assumed that income is adequate for this purpose. However, it has often been argued that people should be taxed on the basis of what they withdraw from the economy rather than on what they contribute, and that consumption is a better indicator of "ability to pay" than income. The important point is that the choice of indicator of "ability to pay" will dramatically affect one's perception of equity.

Vertical equity not only requires that a value judgement be made as to the appropriate indicator of ability to pay, but it also involves the subjective issue of how progressive the tax system should be. Progressivity implies that those with greater ability to pay bear a larger share of the tax burden. An important element of constraint in progressivity is the disincentive effect on work associated with a tax system that overly equalizes post-tax incomes.

In order to evaluate the vertical equity of the tax system it is necessary to measure tax incidence to determine how the reduction in purchasing power is ultimately shared among income groups. The legal incidence of taxes indicates who is legally liable to pay the various taxes. However, this does not necessarily correspond with the effective incidence - which indicates who actually bears the burden of taxes once all market adjustments have taken place. The difference between legal and

effective incidence is directly related to the amount of tax shifting that has taken place. For instance, the corporate income tax might be collected directly from corporations. But if the tax is passed on as higher prices for the corporation's products, then the effective burden of the tax is either partially or totally shifted forward onto consumers. Conversely, if the tax results in lower wages for the corporation's employees, the tax burden is then shifted backward onto labour.

3. Incidence Studies

There is little doubt that tax shifting does occur and that legal tax incidence is therefore a poor indicator of effective tax incidence. Indications are that in many cases, taxpayers, be they firms or individuals, are in a position to shift their tax burden onto others through product price increases (forward shifting) or factor input price decreases (backward shifting). Unfortunately, there is no clear consensus as to the actual patterns of tax shifting.

* Personal Income Tax (PIT)

Usually it is assumed that the PIT is unshifted and that the burden is distributed according to tax payments in a progressive pattern.

* Corporate Income Taxation (CIT)

The incidence of the CIT has probably been the subject of more controversy than any other tax. A full range of shifting assumptions have received support in various studies over time

from those that assume no shifting (the tax is entirely borne by shareholders) to those which assume that the tax is entirely shifted either backward onto labour and/or forward onto consumers. However, the more widely accepted view is that the CIT is borne almost entirely by capital owners in the economy as a whole.

* Property Taxes

Until recently, it was commonly accepted that property taxes are regressive taxes. The portion of the tax that falls on land was assumed to be borne by landowners while the tax on structures was assumed to be entirely shifted onto the consumers of the services provided by the structures. This view of the property tax is now being challenged by a new view which sees the property tax as a tax on capital income which results in a reduction in the rate of return to capital.

* Sales and Excise Taxes

Sales taxes can be applied to a wide variety of tax bases. When a sales tax is applied to a narrow range of goods or services, such as alcohol, tobacco, or gasoline, then the sales tax is referred to as an excise tax.

Taxes on consumption are generally assumed to be borne entirely by the user, and allocated on the basis of consumption of each good and service that is taxed.

* Social Security Taxes

The standard incidence assumption for payroll taxes is that they are entirely borne by labour. In competitive labour markets, the employer is able to shift his portion of the tax by lowering the wage rate correspondingly.

4. Efficiency

In contrast to equity, which is a subjective concept, the concept of efficiency involves a more precisely defined notion of economic theory, in which three conditions are satisfied:

- 1) Efficiency in exchange, whereby all consumers face the same prices in making their economic decisions.
- 2) Efficiency in production, whereby the reallocation of factors could not increase the value of total output.
- 3) Overall efficiency, whereby there would be no welfare gain from reducing the output of one good to increase that of another.

The only tax that does not disturb the conditions described above is a lump-sum tax on each person, or poll tax, because such a tax does not distort relative prices. Since all other taxes involve some inefficiencies - in that they cause resources to be allocated differently than they would be in the absence of taxes - it is necessary to compare the relative distortionary impact of alternative types of taxes and rate structures.

5. Tax Induced Distortions

Each component of the current tax system imposes distortions of one sort or another. Listed below are some of the more important distortions associated with major taxes:

*The Personal Income Tax (PIT):

- a) taxes capital income from different sources differently (e.g. capital gains exemptions, dividend tax credit, nontaxation of imputed rents);

- b) distorts the labour market by driving a wedge between wages paid and wages received; the importance of this distortion increases as income rises due to the progressivity in the rates;
- c) distorts the savings and investment market by driving a wedge between the net return on savings and the price paid by borrowers; also by taxing savings, the PIT favours current rather than future consumption;
- d) favours activities yielding imputed (nontaxed) income.

*The Corporate Income Tax (CIT):

- a) may distort the capital market by misallocating resources away from the corporate sector and into the unincorporated sector, and by reducing the net rate of return to capital - possibly reducing the overall amount of investment;
- b) by taxing part of the return for risk taking, the CIT may discriminate against entrepreneurship and innovation;
- c) by allowing firms to deduct the interest on debt but not the cost of equity finance, the tax may influence the financial structure of firms.

*The Retail Sales Tax (RST):

- a) the RST favours tax exempt purchases because it does not apply across the board to all goods and services;
- b) to the extent that the tax results in lower demand for the taxed items there will be a reallocation of resources;
- c) because the RST decreases the real wage rate, it will result in work disincentives.

*The Manufacturers' Sales Tax (MST):

- a) with its many exclusions and exemptions from the tax base the MST favours tax exempt purchases;
- b) the MST creates incentives to modify the production and distribution process in order to minimize value added up to the manufacturers level;
- c) discriminates against domestic goods by taxing imports net of margins. The tax applies to the value of imports inclusive of custom duty but net of certain margins such as insurance and transportation, which are part of the taxable value of domestic goods.

*The Excise Tax:

- a) discriminates against the use of the goods which are taxed. Excise taxes on products such as tobacco and alcohol may be justified as user fees because the consumption of these products is believed to generate costs for society as a whole, such as loss of productivity and higher health care and crime prevention expenditures. These taxes are also viewed as good sources of revenues because the demand for the taxed items tends to be inelastic.

* The Property Tax:

- a) discourages the accumulation of property if the supply of the latter is elastic;
- b) creates incentives to reallocate property from high tax to low tax jurisdictions to the extent that tax differentials do not reflect differentials in levels of services received;
- c) creates distortions by taxing different types of property at different effective rates (e.g. residential, non-residential, single family dwellings, multi-family dwellings, etc.).

There has been increased interest, in recent years, in the economic distortions caused by tax measures, and several studies have attempted to estimate the costs to society of tax induced misallocation of resources. These studies suggest that the resource allocation costs of distortions caused by the tax system may be much larger than has often been supposed in the past. For instance, indications are that the corporate income tax as it currently stands causes capital to be misallocated among industries. The personal income tax, on the other hand, favours current consumption over saving and future consumption. The costs of these distortions appear to be much greater than those associated with the disincentive effects of taxes on labour supply.

6. Simplicity

While equity and efficiency have long been considered important objectives to achieve in tax design, it is only in the past decade or so that simplicity has become an issue of equal concern. In fact, the current tax reform trend in the U.S. is motivated to a considerable extent by the desire to simplify a tax system so riddled with exemptions, deductions, loopholes and special concessions that it has alienated many taxpayers. This concern over the complexity of the tax system is the result of an increased awareness of the direct and indirect costs of this complexity in terms of taxpayer compliance and tax administration. The need to simplify the tax system is also a concern in Canada although the situation here is not perceived to be as serious.

CHAPTER 3

The Objective of Economic Growth and Job Creation

1. Introduction

Tax reform measures can also be aimed at stimulating saving, investment, work effort, and entrepreneurial innovation. It is often assumed that these macroeconomic effects will in turn lead to increased job opportunities and economic growth. In fact, taxation is seen as having a significant influence on economic growth through its effect on capital accumulation, either in reducing the demand for investments or reducing the supply of savings used to finance investment by taxing capital income (interest, dividends and capital gains) and by reducing the marginal rate of return to corporations from investing (corporate income tax).

2. The Impact of Taxes on Saving and Investment

A. Why Saving Matters

Many tax measures have been designed to reduce taxes on interest income in the belief that people will respond by increasing their savings. The reduction of taxes on interest income may encourage individuals to increase their savings for retirement, and so may reduce future government expenditures for this purpose. Also, there is an expectation that more saving and

investment will create more job opportunities and will stimulate technological progress. Of course, in an open economy there is no guarantee that domestic saving will be used to finance domestic investment. The saving may simply flow abroad. To ensure that any increase in domestic saving is channelled into domestic investment, the government may have to make domestic investment projects more attractive by, for example, lowering the rate at which investment revenues are taxed.

B. Tax Incentives to Encourage Saving and Investment

A number of tax reforms can be implemented to reduce the taxation of investment income. These can best be understood as following either of two approaches. First, taxes can be raised on those types of incomes that do not include a return for saving and investing, and specific exemptions and deductions can be allowed for income that is related to such activities. This type of reform would shift the taxation of income to a labour-income base. This approach is reflected in the taxation of corporate dividends at a lower rate than other income; the exemption of capital gains from taxation; the delayed taxation of some types of interest income until that income is actually realized; the Canadian \$1,000 interest deduction; and the special tax treatment of owner-occupied housing whereby imputed rents and capital gains on such property are both exempt from taxation.

The second approach is to permit deductions of various kinds of saving in the calculation of taxable income. This type of reform would shift the focus of personal taxation from an income

base to a consumption (expenditures) base. If saving is deducted from income in calculating tax payable, then only actual expenditures are taxed. Current examples include deductions for Registered Retirement Savings Plans (RRSPs); Registered Pension Plans (RPPs); and the Canada and Quebec Pension Plans (CPP and QPP).

These measures result in wide variations in effective tax rates on capital among various sectors and activities. At this point in time, however, it does not seem possible to develop numerical estimates of the actual impact of such reforms on saving and/or investment.

C. Saving and Investment in an Open Economy

The tax concessions designed to increase saving could mean that foreign investors would enjoy higher after-tax incomes. To the extent that these benefits would accrue to foreign investors, there may be a political desire to limit such tax concessions or to target them only at New Brunswick residents.

D. New Small Businesses

It is often argued that new small business ventures provide society with special economic benefits. There is evidence that job creation occurs to a greater degree in small businesses rather than in the expansion of the older, larger firms in traditional industries. There are also indications that innovation occurs to a greater degree in small businesses. To

the extent that these observations apply to the New Brunswick economy, tax changes to promote saving, or more specifically, New Brunswick investment, may not be sufficient. Rather, it may be necessary to aim special tax concessions at small businesses. For instance, tax measures designed to increase the availability, and reduce the costs, of small business capital may be particularly effective.

E. Indexing Investment Income

In an inflationary environment, a tax system should provide for the indexing of investment income, with taxes being levied against real income net of the inflation component. Without indexation, both equity and efficiency will be impaired. Taxation of the inflation component of investment income means that the real value of the original investment may actually fall over time. From the perspective of borrowers, a tax system that is not indexed causes a very uneven pattern for after-tax borrowing costs across sectors. Some borrowers may not be able to deduct interest payments for tax purposes.

For investors, taxes should be applied to only the real, after inflation, component of investment income. For borrowers, only the real interest portion of borrowing costs should be deductible against taxable income. In theory, these concepts may appear to be simple. In practise, implementation of inflation indexing involves substantial administrative and compliance difficulties. For example, calculation of depreciation expenses in terms of replacement costs may be particularly difficult. So

may the calculation of asset appreciation if the assets are not sold. In Canada, a number of tax provisions partially offset the impact of inflation on investment income. These include the \$1,000 interest income exemption, RRSP provisions, and the special treatment of capital gains.

3. The Impact of Taxes on Labour Supply

Taxes levied against labour income may alter each individual's choice of leisure versus work. Higher tax rates reduce the material reward for work. Consequently, we might expect that higher tax rates will reduce the number of hours worked - people will opt for more leisure and less work. This leads to several important implications for the design of a tax structure.

First, in order to minimize this reduction in hours worked, a government may decide to limit its reliance on labour income taxes. A government may feel obliged to impose other types of taxes, in spite of their distortions. Second, a government may decide to limit its marginal tax rates for high income people even though greater tax progressivity may be desired for equity reasons. Third, a government may decide to tax different kinds of labour at different tax rates if it is considered that the labour-leisure choice varies across types of labour.

Closely related to the issue of tax impacts on labour supply is the concern about nonmarket activities. If tax rates reach a certain level, then people will devise schemes to exchange their labour without any formal records that would attract tax. Some

observers believe that high tax rates have fostered the growth of the nonmarket economy. Moreover, while many people may not try to evade taxes they may spend a great deal of effort and resources taking advantage of tax loopholes. Even though these activities are legal, they are an inefficient use of society's resources.

An issue of particular importance in considering tax reform options for New Brunswick is that of labour mobility. Tax differentials between New Brunswick and other provinces could lead to migration. In particular, reforms that increase the tax burden on higher income taxpayers in New Brunswick could lead to the emigration of these individuals to other provinces, or even to the U.S., if effective tax rates are less in those other jurisdictions.

4. The Tax Structure as a Mechanism for Economic Stabilization

The tax system has long been viewed as an important tool of stabilization policy. Changes in tax revenues affect the disposable income in the hands of consumers and corporations. To the degree that aggregate demand is a function of disposable income, changes in tax revenues can affect an economy's income and employment. In particular, economic recession may be moderated if tax revenues are decreased; and the inflation that accompanies full employment may be restrained if tax revenues are increased. A tax which, by design, yields revenues that increase in periods of economic growth and decrease when there is a slowdown of activity is called an automatic stabilizer.

Conscious manipulation of tax rates over the course of economic cycles may offer a means of fostering steady growth without extreme unemployment on the one hand, or inflation on the other. Consequently, tax reform for New Brunswick should be based on a decision as to the stabilization role to be expected from counter-cyclical tax changes.

5. Conclusion

Equity, efficiency, simplicity and economic growth are the main objectives to consider in the context of tax design and tax reform. However, even a brief description of these basic objectives makes patently obvious the fact that these are to a great extent incompatible, and that to subscribe to any one or more of these objectives immediately involves trade-offs. For instance, taxing the return to savings may increase the progressivity of the PIT but it also increases the distortionary effects of the tax related to the choice of current versus future consumption. In the same vein, using the CIT either as a withholding device or to tax the profits of corporations may be viewed favourably in terms of fairness, but it must be realized that there is a cost associated with this approach due to the potential misallocation of resources.

Unfortunately, the degree of objectivity in ranking the criteria or objectives related to tax design is restricted by the state of current economic analysis. Accurate measurements of the various trade-offs involved are simply not available. Consequently, the relative importance attached to various

objectives at any point in time will involve a certain amount of subjective judgement.

This issue is further complicated by the fact that assessments of the economic, social and political problems to be addressed are likely to be quite different depending on the perspective adopted. The federal government can be expected to view these problems in a very different light than a provincial government. For that matter, there is also no reason to believe that the provinces would agree on the choice of the most important objectives. For New Brunswick, where relatively high unemployment rates and lower than average per capita income are very much a concern, it matters a great deal whether the federal government chooses to improve the redistributive effects of the tax system or alternatively, to reduce tax-induced distortions. New Brunswick is likely to benefit from the former but not necessarily the latter. The point is that the national interest may not always coincide with regional interests. The federal government, having chosen a particular combination of taxation objectives, may find that the effects of its tax measures vary substantially among the provinces.

It is also important to recognize that from the point of view of a province such as New Brunswick there is only limited room to maneuver in pursuing these various objectives on its own. Because of certain provisions in the Canadian Constitution and the tax collection agreement with the federal government, the province is somewhat restricted in terms of the tax policy tools available to implement its chosen objectives.

CHAPTER 4

General Options in Tax Design

1. Introduction

The options in tax design are several. The tax base can be defined either on the basis of income or consumption. Tax liabilities can be estimated on the basis of yearly indicators, or they can reflect the lifetime position of the taxpayer. Revenues can be raised either through direct or indirect taxation or a mixture of both. Tax provisions can be either broadly based or aimed toward individual industry or income groups. The rate structure can also be designed to achieve a pre-determined degree of progressivity in the distribution of the tax burden. Each of these alternatives reflects a series of choices as to the appropriate indicator(s) of ability to pay, the degree of progressivity required, the type of activities to promote and how to promote them.

2. The Tax Base

One's assessment of the equity of the tax system is very much dependent upon one's view as to the appropriate indicator of well being or "ability to pay". Comprehensive income has traditionally been perceived to be the ideal tax base.

However, there are several conceptual, as well as practical, difficulties encountered in implementing a comprehensive income

base. The equal treatment of all sources of income is certainly desirable in theory. But in practice this would involve the inclusion of all sources of imputed income including leisure income and rental income from owner-occupied housing. Not only are there technical and practical problems in measuring these various forms of income but also the taxation of such "intangibles" is likely to be perceived as unfair. The taxation of real capital gains as they accrue is also considered impracticable. Moreover, in the presence of both a corporate income tax and a personal income tax, it is necessary to integrate the two systems to avoid double taxation of some sources of capital income and to prevent certain types of income from escaping taxation altogether. The issue of fluctuating incomes also brings into question the appropriate time frame underlying the tax base since the use of annual income results in inequities.

It has been argued that a consumption base may be more equitable than an income base because it is consumption that ultimately yields satisfaction, not income. A consumption tax eliminates one of the major negative effects of the income tax, namely, the disincentive effect on savings resulting from the taxation of interest, dividends and capital gains. Also, several of the most severe difficulties in implementing an ideal comprehensive income base are eliminated under a consumption base. The tax base is equivalent to the difference between current income and net savings. There is therefore no need to include accrued capital gains or to index the base for inflation.

Wealth could also be used as a tax base. However, because of the many difficulties associated with achieving a proper assessment (in market value) of various forms of wealth and the problems of enforcing a tax on such a base, a true wealth tax has severe practical disadvantages. The property tax levied on real property is essentially the only form of wealth tax commonly used in most societies. The paid up capital taxes levied in some provinces could also be categorized as a form of wealth tax.

The use of multiple bases exists for political, social as well as practical reasons. The true well being or "ability to pay" of individuals cannot be adequately reflected by one single indicator. The mixture and noncompatibility of the tax objectives also result in the need to apply various forms of taxation. Different taxes offer different mechanisms to achieve the chosen objectives of tax design. The use of a variety of tax bases offers the extra flexibility required to simultaneously implement a number of objectives and to balance the inevitable trade-offs.

On a more practical level, levying all required revenues through one tax would compound the inequities and distortionary effects of this particular tax and would certainly involve severe compliance problems. Also, in selecting a tax base or a mix of tax bases, a government must take into account the mobility of this base. The mobility of factors results in tax shifting and an effective tax burden which might be unintended. Other practical issues may affect the choice of tax bases. For instance, revenue stability may be a concern. To the extent that incomes fluctuate more than consumption, over time, the latter will be a more

stable source of tax revenues. Another factor which indirectly affects the size of the tax base is the relative importance of household production activities resulting in imputed incomes. These issues are of particular concern for a small jurisdiction such as New Brunswick.

3. The Mix of Direct and Indirect Taxes

Tax systems are usually designed to incorporate a tax mix so that revenues will originate from both direct and indirect taxation. The distinction between direct and indirect taxes is not always conceptually clear. A useful framework is one which relates these to the circular flow of income, whereby direct taxes are the ones levied directly on the source side - that is on income before it is used - while indirect taxes are the ones levied on the use side on the basis of that use.

The impact of a direct tax will tend to be observed on money income while that of an indirect tax will be reflected in increases in the price level. It can be argued that direct taxes are superior under both equity and efficiency criteria since these taxes have the built-in capacity to take account of taxpayers' circumstances. They are more likely to be compatible with horizontal equity objectives and may, if broadly based, be less distortionary than indirect taxes. Another point of view is that direct taxes should be used to achieve the equity objective, leaving indirect taxes to address the issue of efficiency.

Excise taxes are an important type of indirect tax. They can be used to improve equity by taxing luxury goods. Also, to

the extent that a tax can be targeted on consumption directly related to services received from certain public expenditures, the benefit principle of taxation may apply. Finally, excise taxes on products such as tobacco and alcohol may be justified because the consumption of these products is believed to generate costs for society as a whole.

The case for a general sales tax, on the other hand, is related to the type of direct tax in place. Relying more on a general sales tax would lighten the burden on income from capital under the PIT, thereby moderating savings inefficiencies. As for the work-leisure distortion also associated with the PIT, the use of a general sales tax could be advantageous from this perspective as well. Perhaps the more important arguments in favour of using sales taxes relate to the fact that the current PIT is probably much more subject to evasion and avoidance than the sales tax, and the fact that broad-based indirect taxes are efficient revenue raisers.

Presently in Canada, there are two types of sales tax levied: the manufacturers' sales tax (MST) at the federal level and the retail sales tax (RST) at the provincial level. The case against the MST is well known. This form of taxation violates all the principles of taxation. Because of the numerous exclusions, exemptions, multiple rates, indirect taxation of inputs, variations in wholesale-retail margins and diversity in distribution trade channels, the MST is highly distortionary. Although the retail sales tax is a preferred mode of indirect taxation on theoretical grounds, it also generates some important distortions because, as implemented, it involves significant

exemptions (food, for example) and exclusions (mainly services) from the tax base and also because many capital goods end up being taxed. Both the production and consumption neutrality principles of sales taxation are therefore violated.

In conclusion, there is a case for using a general form of indirect taxation in combination with a direct tax. Indirect taxation, however, does not lend itself easily to pursuing equity objectives.

4. The Choice Between a Broad or a Specifically Designed Tax Base

Of all the taxes currently applicable in Canada, there is not one that could fairly be described as a true broadly based tax. The PIT has several exemptions, deductions, and exclusions from the tax base. The CIT has accelerated depreciation allowance provisions, investment tax credits, as well as various deductions and differential rates related to specific types of economic activity. The federal manufacturers' sales tax (MST) is notorious for its numerous exemptions and exclusions from the tax base, its poorly specified tax base, and its application of more than one rate. At the provincial level, the only general type of tax is the retail sales tax (RST). It can be recommended for its uniform rate and well defined base but it is also subject to numerous exemptions such as food and clothing and exclusions such as services.

As a general rule, any tax provision that introduces non-neutralities will create inefficiencies. The rationale for these

measures varies in each case. The more important exemptions from the sales tax, for instance, exist for equity reasons. Food, prescription drugs and sometimes clothing are exempt in order to remove some of the tax burden on low income taxpayers when they purchase items considered as necessities. Exemptions like these improve the perceived fairness of the tax and its acceptability. The special provisions offered under the CIT, on the other hand, occur mostly in the context of the economic growth objective. They operate to provide an incentive for the purchase of assets for particular uses or by particular industries. Special provisions have also been in place for some time to facilitate research and development, and statutory tax rates have been reduced in the case of manufacturing and small business enterprises.

The reasons for the numerous exemptions and deductions from the PIT base can be categorized broadly in terms of two objectives. Some measures are used to achieve certain social goals including improved horizontal and vertical equity, while others are designed more specifically to encourage saving and investment. Personal exemptions and deductions for medical expenses, charitable donations, education costs, social insurance and child care expenses qualify under the first category of objectives, while deductions for RRSPs and tax exemptions for interest, dividends and capital gains involve the second objective.

The important fact to consider in this discussion is that these deviations from broadly based taxes involve direct costs in terms of revenues foregone as well as indirect costs in terms of

the losses incurred from the misallocation of resources in the economy. In addition, these exemptions and deductions usually result in the need for statutory rates to be higher than otherwise would be required. These costs must be weighed against the benefits to be gained from the tax provision. Also they must be considered in the context of whether these benefits might not be obtained more efficiently through other measures such as expenditure programs or regulations.

Tax incentives have recently come under criticism in the U.S. and Canada for creating wide margins in effective tax rates between industries. More importantly, they have become a determining factor in the business decision process while not necessarily providing the desired impact. It has also been argued that both distribution and economic incentive objectives might be better served through expenditure programs. Unfortunately, it is very difficult to assess these arguments objectively, given the lack of consensus as to the relative value of the trade-offs between the basic objectives underlying tax design. It should be noted, however, that the distortionary effects of certain taxes are now believed to be several orders of magnitude larger than previously thought.

5. The Rate Structure

Another area of choice in design - although mainly in the context of the PIT - is that of the rate structure. The issue in this case is to achieve, through the structure of marginal tax

rates, a certain degree of progressivity which would result in a higher tax burden for those with higher "ability to pay".

CHAPTER 5

Factor Specific Taxes

1. Introduction

This chapter presents some of the general issues which relate to the implementation and the impact of factor specific taxes such as property taxes, payroll taxes, capital taxes and resource taxes. These alternative forms of taxation are of particular interest in the context of provincial tax reform.

2. Property Tax

The property tax has long been the subject of considerable criticism both because it can be described as an administrative nightmare (mainly because of assessment practices), and because it is perceived to be a regressive tax, that is a tax whose burden falls more heavily on individuals in lower income groups. However, there has been much interest in this form of taxation in recent years, and a "new view" has been brought forward which suggests that the case against the property tax is not as clear cut as previously thought.

Proponents of the "traditional view" analyze the property tax in two components: 1) a tax on land which is borne by the owners of land since the latter is assumed to be in fixed supply and; 2) a tax on structures which is fully shifted forward to the consumers of the services provided by the structures.

The new view of the property tax suggests that because the rate of saving is rather insensitive to changes in the rate of return to capital, capital owners are unable to shift the burden of taxes. The property tax is therefore treated as a capital tax which reduces the rate of return to capital by approximately the nationwide average rate of property tax. The only excise effect resulting from the property tax is that which occurs because of the differences between local property tax rates and the average national rate. Although property tax incidence is more progressive at the upper end of the income scale under new view assumptions, the incidence of the property tax is likely to be regressive over the bottom income ranges regardless of which view is supported. The reason is that individuals in the bottom income ranges not only spend a large fraction of their income on housing, but they also receive a large fraction of their income from capital. This is due to the relatively high proportion of retired pensioners in low income groups.

The property tax can create distortions at several levels. To the extent that these differences do not reflect differences in the level of services provided, the differential taxation of business property versus residential property will cause resources to be misallocated intersectorally; the differential taxation of apartment buildings versus single family dwellings will also cause resources to be misallocated intrasectorally; the interjurisdictional and international rate differentials will cause interjurisdictional and international misallocation of resources. These differentials, along with the fact that assessment practices tend to be nonuniform, and that market

values are in some instances difficult to assess, suggest that the property tax can be quite distortionary.

It has been argued, on the other hand, that given the current favourable treatment of owner-occupied housing under the PIT (i.e. nontaxation of net imputed rental income and of capital gains on owner-occupied dwellings), the residential property tax tends to even out effective capital tax rates, thereby reducing intersectoral distortions between the corporate and noncorporate sectors.

One of the recurrent themes in the property tax debate is that this tax should be "benefit related." Such an application would involve considerable restructuring of local finances. Many of the local public services are of more benefit to residential property owners than to businesses. Another efficiency related argument for changing the tax mix between residential and nonresidential taxes relates to the fact that business capital tends to be more mobile than residential capital and therefore more effective in shifting the tax burden.

On the basis of this review of the property tax, it can be said that the system, as it currently stands in New Brunswick, is superior to that in some other provinces, particularly from an administrative point of view:

- a) New Brunswick is the only province, other than Prince Edward Island, that imposes a province wide property tax at the provincial, as well as the municipal level. The structure of the property taxes is similar at both levels;
- b) The province performs all assessment and collection functions;
- c) All property is assessed as either residential or nonresidential and is assessed at its "real and true"

value. Assessment takes place at least every five years;

- d) There are no exemptions for schools, colleges, universities and public hospitals;
- e) Municipalities set their own property tax rates;
- f) The provincial government has responsibility for people related services such as education, health care and welfare, which are financed out of general revenues;
- g) The nonresidential property tax is levied entirely on the property owner; there is no business tax on the occupier as in most other provinces.

However, we would argue that the rate structure should be reconsidered in the context of tax reform in New Brunswick. As in most other provinces, this rate structure provides preferential treatment to residential property. In New Brunswick, the nonresidential rate is 1.5 times that for residential property. Municipalities' rates are also bound to this ratio. The rate differential is even wider in the case of owner-occupied dwellings because of the homeowner tax credit. The homeowner tax credit eliminates provincial property tax liability for homeowners within municipalities, and it reduces the rate applicable outside municipalities to \$0.65 per \$100 of assessment. Moreover, the rate on owner-occupied residential property outside municipalities is often substantially lower than the rates applicable within municipalities thus generating further distortions. Basically there is no economic rationale for these variations in tax rates. Rate differentials are the source of significant distortions the costs of which should not be ignored.

3. Capital Taxes

Currently, eight provinces out of ten impose taxes on the capital of a corporation having a permanent establishment in the province. In terms of the basic objectives of taxation, this form of levy does not appear to have much to recommend it. It discourages new investment, and it creates incentives for mobile capital to leave. consequently, the effective burden of the tax rests on labour, to the extent that labour is immobile, and also on landowners. From the provinces' point of view, the main advantage of using this form of taxation stems from the fact that it diverts tax revenue from the federal government. Capital taxes are deductible against the CIT so in effect revenues raised through such a tax exceed the burden placed on corporations. It should also be pointed out that the fact that the majority of provinces levy capital taxes reduces the importance of the capital mobility argument against corporate capital taxation.

4. Resource Taxation

The corporate income tax as it is presently structured results in the preferential treatment of resource industries. These industries benefit from low effective tax rates due to such provisions as accelerated depreciation allowances, investment tax credits, and earned depletion, specifically aimed at this sector.

An additional problem in the context of resource taxation has to do with the fact that the provinces, which have jurisdiction over natural resources, currently levy a wide array

of taxes on resource industries. Since none of these taxes are deductible from any other, tax cascading is a definite possibility. Furthermore, the resulting tax differentials can distort interprovincial trade.

New Brunswick currently levies a 16 percent tax on the net profits of mine operators (over \$100,000), with a deduction of \$1.50 for every \$1.00 spent on exploration expenditures and a royalty of 2 percent of net revenues from minerals.

On theoretical grounds, the taxing of economic rents is preferable to the taxing of other sources of income because it does not introduce distortions in the economy. It is neutral in its impact on resource allocation. The simplest form of taxation on rents is a profits tax with a tax base defined to reproduce the cash flow of the resource producing corporations (i.e., all revenues realized less the sum of current costs on a cash flow basis). Such a cash flow tax would require that a system of complete loss offsetting be implemented. Alternatively, the tax base could be designed to approximate the flow of rents by including all revenues and deducting current costs on an accrual basis. This type of system, like any other requiring measurements on an accrual basis, is more difficult to design and administer.

An important fact to consider is that the current federal and provincial tax systems, as designed, do not tax resource rents. The corporate income tax is only partly a profits tax. Provincial resource taxes are for the most part royalties based on the value or the level of production. These royalties are

inappropriate for taxing rents because revenues and profits are not necessarily correlated. Also, royalties on revenues are distortionary because of their disincentive effects on production. For New Brunswick these are important issues to consider, since the government levies both a profits tax and royalties.

The ways in which governments have taxed resource industries do not reflect the more ideal forms of taxation. The federal government has used price regulation and export taxes as a means of achieving regional redistribution of profits and of retaining them within Canada. Reform in this area would require federal-provincial cooperation in order to tax resource industries on a consistent and more efficient basis.

5. Payroll Taxes

In Canada, payroll taxes are, for the most part, mandatory federal levies used to finance social insurance schemes such as unemployment insurance and public pension plans. However, the contribution rates are not designed as user fees and such taxes are usually considered to be regressive because the flat-rate levy only applies up to a relatively low income ceiling. The benefit principle of taxation does not generally apply since the social insurance schemes involved are not actuarially fair. Some groups invariably gain relative to others.

Payroll taxes have equity effects resulting from the taxation of only one source of income, and that source on a regressive basis. They also have efficiency effects. Taxing

labour income results in disincentives to work and distortions in the consumption-leisure choice. Unemployment insurance and public pension premiums will also affect private saving decisions as well as work patterns, such as when to work, where, and for how long. As a general rule, the burden of payroll taxes will be on wage earners even if a portion of these taxes is collected from employers.

It is generally argued that a more equitable social insurance system would collect funds on the basis of ability to pay. This could be done by raising the amount of earnings subject to the tax, or removing the limit on taxable earnings. Other alternatives include integrating the payroll and income taxes, or using general funds to finance social security benefits. Any of these approaches would increase the overall progressivity of the tax system.

At the provincial level, the most common payroll tax is the workers' compensation levy. Payroll taxes at the provincial level are particularly inefficient because they are, for the most part, shifted onto labour, and they create distortions, particularly in the work-leisure choice. They may also interfere with inter-provincial trade.

6. Medical Insurance Premiums

Five provinces currently finance a portion of their health care expenditures through means other than general revenues. Quebec and Manitoba levy payroll taxes from employers. The general rate is 3.22 percent in Quebec and 2.25 in Manitoba. The

revenues generated from these taxes cover only a portion of total health care expenditures. The remaining costs are financed out of general revenues. Ontario, Alberta and British Columbia, on the other hand, use social levies to help finance their medical insurance programs. Contribution levels vary between unattached individuals and those with dependents and lower rates are applied to low income taxpayers. Senior citizens and welfare recipients are exempt.

Although payroll taxes do not comply with either the benefit principle or the ability to pay principle, it is often argued that medical insurance premiums do. However, such is not the case. For the benefit principle to apply in a social insurance scheme, there would have to be a "direct link" between the taxpayer's use of the services and his or her contributions. Or at least a "budget link" would have to exist, which means that total program expenditures would be related to the level of revenues collected from those who benefit from the plan. Neither of these conditions apply in current health insurance plans.

The ability to pay principle, on the other hand, only applies to the extent that individual taxpayer circumstances are taken into account in setting rates. However, the application of this principle is severely constrained by the fact that contribution rates in current plans are only related to income up to a predetermined, relatively low, taxable income ceiling. Above that ceiling, contributions are fixed and totally unrelated to ability to pay. Moreover, to the extent that premiums are a part of fringe benefits provided by employers, they are equivalent to the payroll taxes levied in Quebec and Manitoba.

Also, because the effective level of employers' contributions appears to be determined by such factors as firm size, market conditions, and the presence of labour unions, it is likely that people of equal ability to pay are treated differently under such plans. Overall, health care premiums rate poorly on both vertical and horizontal equity grounds.

CHAPTER 6

The Process and Implications of Canadian and U.S.

Tax Reform

1. Introduction

The U.S. has recently undertaken significant reform of its tax system. Because of the strong economic ties between the U.S. and Canada, the repercussions of this reform are likely to be felt for some time in this country as well. For instance, relative prices within the U.S. will change in response to the alterations in effective tax rates. These price changes will affect international trade flows. For both individuals and corporations, after-tax incomes from U.S. activities will change and this could lead some of them to alter their decisions about where to live and where to invest. Furthermore, certain changes have been made in the treatment of foreign income for U.S. tax purposes, and these will directly affect the after-tax profitability of U.S. investments in Canada. Faced with U.S. tax reform, the Canadian government may be compelled to alter the Canadian tax structure so as to counteract some of these effects.

Canada has also been reassessing its tax system. Recent Canadian federal budgets and discussion papers have suggested a number of tax reform options being considered. Comparisons with the U.S. Tax Reform Act reveal interesting similarities as well as some important differences. Both countries are seeking to

broaden the corporate tax base by cutting back on permissible deductions and special concessions. Both have recently introduced a new minimum tax provision to ensure that the wealthy cannot completely avoid paying tax by using exemptions and deductions. The additional revenue raised in this way will allow a significant decrease in statutory tax rates. Nevertheless, full taxation of capital gains in the U.S. contrasts sharply with the recent Canadian \$500,000 lifetime exemption. U.S. reductions in the tax deductible limits for pension contributions contrast sharply with Canadian plans to increase these. The Canadian government proposals to introduce a new business transfer tax find no equivalent in the U.S. Finally, while the U.S. reform shifts a major share of the tax burden from the personal to the corporate income tax, it is still too early to predict the ultimate weight to be assigned to these taxes in Canada, although here the implementation of a new broad-based sales tax is expected to play a major role. The Tax Collection Agreements with the provinces create an additional complexity for Canadian reform. While Canadians may gain valuable insights from the U.S. debate, indications are that the approach to reform may be significantly different here.

For a province like New Brunswick, this ongoing process, both in the U.S. and at the federal level, is of significant importance because the province's economy will inevitably be affected through the resulting changes in flows of capital, labour, goods and services. Furthermore, any change of substance in terms of redefining the tax mix or the tax base at the federal

level, will automatically affect tax and transfer revenues at the provincial level.

2. U.S. Tax Reform

The implications of U.S. tax reform for Canada are both complex and difficult to predict. On the one hand, lower statutory tax rates mean that large U.S. based corporations which derive a large proportion of their income abroad (including Canada), will see a reduction in their foreign tax credits (FTC). Also, specific measures have been proposed to restrict the averaging which once took place, further reducing the size of FTC's. In response, U.S. companies might focus on reducing foreign tax liabilities. This, combined with tax rate differentials favourable to the U.S., might encourage U.S. companies to shift profits to the U.S. and possibly pull back plants and jobs, although the latter is not as likely due to mobility constraints. Nevertheless, Canada, with its high levels of U.S. direct investment might be particularly vulnerable in this regard. Even though Canada has undertaken its own reform of the corporate income tax, the expected drop in the federal basic rate to 33 percent might still leave a considerable rate differential.

It is likely that the rate differentials on the personal income tax side will cause even more concern. Several elements should be considered here. First, our PIT base is quite different than that in the U.S. and actually much closer to a consumption base than a true income base. The \$500,000 lifetime

capital gains exemption and the relatively high limits on deductible contributions to registered retirement savings plans illustrate this point. Second, although it has been argued that it may be the young, relatively mobile professionals, who will respond to lower U.S. income tax rates, it is also the case that moving is an all or nothing proposition involving considerable tangible and nontangible costs. In this context, a comparison of average rather than marginal rates may be more relevant. Another factor to consider in comparing the tax rates between countries is the relationship between these rates and the level of public goods and services provided. Higher Canadian rates may be balanced by higher government expenditures in Canada.

The same arguments apply in terms of CIT changes and their impact on capital mobility. The U.S. rates are being lowered, but the Foreign Tax Credit provisions are expected to bring little additional revenue and are meant to be neutral with respect to capital mobility. Furthermore, the overall burden on the corporate sector is expected to increase by \$120 billion over the first five years. Certainly, it is not clear that our CIT rates must drop any further than the 33 percent proposed in the 1986 budget.

Finally, it should be added that U.S. tax reform could lead to changes in the terms of trade. For a province like New Brunswick which exports 68 percent of its products to the United States, the impact could be significant. The latest U.S. proposals, which increase the taxation of capital, may lead to a decline of foreign capital inflows. If the U.S. foreign exchange rate consequently falls, there will inevitably be a reduction in

the level of U.S. imports. This in itself could prove detrimental to New Brunswick.

3. Canadian Federal Tax Reform Proposals

Several recent tax changes implemented by the Canadian government will not only have a direct impact on New Brunswick residents as federal taxpayers, but they will also affect the revenue levels that the New Brunswick government receives under the Tax Collection Agreement. These modifications include capital gains exemptions, pension deductions, and the new minimum tax. Among the current proposals for additional federal reforms, one that is particularly important for New Brunswick is the possible introduction of a type of value added tax such as the business transfer tax.

* The Personal Income Tax

The Canadian personal income tax, as it stands today, is quite different from the ideal uniform income tax described by economic theory. The system is particularly lacking in the way it treats personal investment income and business income. Several major sources of capital income are excluded from the tax base while others are seriously mismeasured. In fact, it can be argued that the present system, particularly following the 1984 and 1985 Federal budget proposals, is much closer to a consumption tax than to an income tax.

There are two alternative treatments of investment under a consumption based tax - each yielding an equivalent present value

tax base. The first approach consists of placing assets in a qualified account. The value of these assets and their earnings are then tax deductible and are subject to tax only upon withdrawal. In Canada, registered retirement savings plans (RRSP) and retirement pension plans (RPP) receive registered treatment under the PIT.

The second approach is equivalent to a wage tax treatment. Savings and investments are tax deductible but the earnings from these activities are also not taxable. Several current income tax provisions follow the wage tax approach. The \$500,000 lifetime capital gains exemption, announced in the May 1985 budget, certainly qualifies as such. So does the nontaxation of imputed rents and capital gains accruing to owner-occupied housing.

Overall, it can be said that the general trend underlying the more significant changes in the Canadian PIT has been away from base broadening and the taxation of comprehensive income toward a consumption tax approach. As a result, the structure of the PIT contains some inconsistencies in that only certain forms of assets receive consumption tax treatment, while others, such as interest and dividend income over \$1000, do not. These inconsistencies create additional distortions in the system.

* The Corporate Income Tax

Until the May 1985 budget any discussion of CIT reform had focussed mainly on the need to integrate this tax with the personal income tax so that certain sources of income would not be taxed more than once or escape tax altogether.

A discussion paper on CIT reform was tabled with the May 1985 Federal budget. The paper indicates that a significant proportion of profitable corporations do not pay taxes and, furthermore, that some of these companies could not even make use of all the preferential tax measures available to them. The strategy proposed by the government will result in a reduction of investment incentives accompanied by lower statutory rates. The object is to tax more corporations at reduced tax rates thereby removing some of the inequities of the current system with its selective tax breaks.

The February 1986 budget included recommendations to begin implementing corporate income tax reform. The general investment tax credit is to be phased out by 1989, although the special provisions for designated areas and research and development will remain. The Special Investment Tax Credit is reduced from 50 to 40 percent. The budget also announced the elimination of the 3% inventory valuation adjustment and a gradual reduction in statutory rates by 1989. Further, the budget indicated that a reduction in capital cost allowances accompanied by further reductions in CIT rates would be considered in a next round.

* The Manufacturers' Sales Tax (MST)

Considering both the level and relative share of revenue involved, the Manufacturers' Sales Tax (MST) has been the subject of more discussion and criticism than any other federal tax. It has been dubbed "the bad tax that won't go away".

The MST is levied at the basic rate of 12% on the price at which goods are sold by a manufacturer to the purchaser. It has

been criticized for its narrow and poorly defined base, the numerous exemptions from the tax base, the application of differential rates and the discriminatory treatment of domestic products.

The February 1986 budget did announce that the government was looking at the possibility of replacing the manufacturers' sales tax with a Business Transfer Tax (BTT), a form of Value Added Tax (VAT). Basically, a VAT consists of a tax on the value added originating in a firm. It is imposed at each stage of the production or distribution stream. It has a neutrality advantage since services as well as goods are taxed, and because it is not affected by the patterns of production or distribution, as are the manufacturers and the wholesale sales taxes. The method commonly used to collect the tax is the credit method whereby a firm calculates the tax on its final selling price and deducts the tax that has been imposed on its purchases. This method is considered to be straightforward. It also minimizes tax evasion since records must correspond between firms along the production stream.

The BTT, on the other hand, is based on a subtraction method of collection. The tax liability is determined by applying the tax rate to value added which in turn is calculated by deducting purchases from sales. It would appear the subtraction method (BTT) has been given preference over the credit method (VAT) as a reform option because it avoids the cash flow problems and the additional paperwork associated with the credit or invoice method VAT. The major issue with implementing either a federal VAT or BTT relates to the existence of provincial retail sales taxes.

Basically, implementing a VAT along side the RST would involve two independent systems of registration and exemptions as well as two different methods of calculating tax liabilities which greatly increases compliance costs. On the other hand, it is not clear that the two levels of government could define sales tax collection agreement whereby provinces would retain a sufficient degree of freedom to exempt particular goods and services in pursuing local economic objectives.

4. Conclusion

The reform process was already in motion in Canada prior to the latest U.S. tax reform events. Various domestic political factors, together with the U.S. experiences, have pushed Canadian tax reform once again into the limelight. This time the direction for change seems very clear. The major theme both north and south of the border is a broadened base and lower rates. The CIT in Canada has already gone through a round of modifications to that effect, with the February 1986 budget. However, great concern has been expressed over the discrepancy in PIT rates which will exist between the countries once U.S. reform is implemented. There will therefore be a certain amount of pressure to follow suit in Canada and collapse our PIT rate structure.

However, it appears the strategy adopted may be considerably different in Canada. The obvious way to significantly broaden the PIT base would be to eliminate or drastically cut back the

\$500,000 lifetime capital gains exemption, or to pull back from the ever increasing RRSP deductible contribution limits. These measures would indeed enable an important restructuring of the tax rates. But indications are that another direction is being considered. Canadian tax reform could well revolve around the implementation of a broadly based consumption tax, the BTT, to replace the manufacturers' sales tax. This tax will apply across the board to all goods and services. Because it is costly to administer, it needs to be implemented at a significant rate. It has tremendous revenue potential which would give the government some leeway to further lower the CIT rates and, more importantly, to cut the PIT rates and effectively reduce the relative importance of the PIT as a revenue source.

A shift in the major sources of revenue at the federal level is therefore expected. As a result there will be much less reliance on the PIT and much more on the sales tax. In the case of the PIT, lower rates would certainly result in lower PIT revenues for provinces that specify their rate as a percentage of federal tax payable. The situation is different with the CIT. Provinces apply their own marginal tax rates to the federal tax base, and so a broadened base could result in higher provincial revenues if rates remained constant. The consequences of implementing a BTT are also quite important to ascertain. The RST currently applies to the price of goods gross of the MST. With the implementation of the BTT, most goods and services become taxable, and so the BTT rate will likely be considerably lower than the current MST rate of 12 percent. This could result in lower provincial RST revenues. As a major

purchaser of goods and services, the New Brunswick government may have to pay a larger BTT on its purchases than it would have paid under the MST. This would mean a larger sales tax payment from the provincial government to the federal government.

Among all these issues, the most significant question for New Brunswick will be whether it should opt for a federal-provincial sales tax collection agreement. New Brunswick could eliminate its RST and, in its place, add a provincial BTT rate on top of the new federal rate. This would reduce administrative and compliance costs, and it would broaden New Brunswick's sales tax base. However, such integration with the federal BTT would probably severely limit the provincial government scope for intervention through its tax system. In any event, the province should assess the variety of options in terms of setting up a sales tax parallel to, or as piggy back on, the federal BTT. As the federal government begins releasing the details of tax reform proposals, the degree of practicability of these options should become more evident.

CHAPTER 7

The Scope for New Brunswick Tax Reform within the Canadian Tax System

1. The Rationale for Harmonization of Taxes

From the perspective of equity, taxes should affect citizens living in different geographical areas in similar ways and to a similar degree. For tax purposes it should not matter to a citizen where he or she lives within the federation. This principle also suggests that it should be a matter for the federal government to decide upon the appropriate degree of income redistribution to be achieved through the tax system.

A similar case can also be made with respect to taxes that can be shifted. These taxes should be reserved for the federal government, to avoid the possibility of provincial governments shifting the burden of their public expenditures onto citizens living in other jurisdictions. Only the residents who will benefit from a certain province's expenditures should pay for them. Provincial reliance on taxes that can be shifted would not only be inequitable, it might also encourage an inappropriate provision of public goods and services.

A number of other efficiency issues support this division of tax powers. For the maximization of aggregate national income, it is necessary that factors of production be located geographically on the basis of efficiency rather than tax considerations. Different tax structures along with tax

competition among provinces to provide location incentives could prove quite costly in terms of the tax induced distortions.

There are also difficulties of taxpayer compliance if provincial governments have different tax structures and tax rates that are not harmonized. In particular, taxpayers may be subject to double taxation if two jurisdictions have different formulae for calculating taxable income, or if they lack a clear agreement for sharing their tax rights. At present, an allocation formula has been agreed upon throughout Canada. However, taxpayers can still encounter complex difficulties, especially if they move into or out of Quebec, with its separate personal income tax. If every province had its own personal income tax system, these difficulties would multiply.

Apart from administrative and compliance costs, a serious problem of separate systems is tax evasion. Even if one does not consciously evade taxes through illegal manipulations, nevertheless, one has a financial incentive to arrange one's business affairs among the various jurisdictions so as to minimize tax.

New Brunswick cannot ignore these arguments for tax harmonization with the systems of other provinces and the federal government. From this perspective, differences in tax rates would be advisable only to the extent that they correspond to differences in the level of public services provided by the provincial governments.

2. The Rationale for Tax Differentials Among Governments in a Federation

The preferences of residents may differ so significantly among jurisdictions that uniformity is simply not feasible. Such differences may even extend to preferences for different types of taxes and different degrees of progressivity. Some commentators argue that stabilization requirements also differ significantly among geographical regions and so a uniform national fiscal policy is not desirable. It can also be argued that to obtain similar after-tax income distributions it may be necessary to apply different degrees of progressivity among provinces.

While individual preferences may be expected among geographical regions, the real issue is the extent of these differences. Here we enter the realm of political judgement. For Canadians, the clearest illustration of this perspective can be found in the experiences of Quebec. Over the past twenty years, Quebec has instituted a large number of tax changes that make its tax structure and tax rates significantly different from those of other Canadian provinces. Furthermore, a number of differences in tax structures exist across Canada in regard to user fees for education and health care.

It is also the case that the intensity and duration of business cycles would vary among geographical areas. Again, the basic question concerns the degree of such differences. Canada's provinces have different resource endowments, different types of manufacturing, and different trade relationships with each other and with foreign nations. Some observers argue that these

differences are so great that a national stabilization policy is not adequate. Each province must supplement the federal government's fiscal policy with its own independent action.

The ability to conduct an independent fiscal policy would depend upon the extent to which residents make their purchases from outside of the province. If most of a province's expenditures are on imports, then a provincial deficit will not have much impact on local employment; rather, the deficit will be dissipated in "leakages". This indicates that the scope for provincial fiscal actions may be greater for Ontario, Quebec and the western provinces.

Within Canada, each province has a distinctive industrial structure. One might argue that this requires a particular pattern of corporate tax exemptions and deductions. The optimal public policy for Ontario, for example, may require a corporate tax structure that is different from that of Canada as a whole.

However, each government faces a limit in the extent to which it can offer special tax concessions. It must raise a total revenue roughly equivalent to its expenditures. Furthermore, for each type of tax, it cannot raise statutory tax rates very much above the tax rates in neighbouring jurisdictions. The need to raise a certain tax revenue, together with the practical limitation to increases in statutory rates, places a limit on the special tax concessions it can offer.

3. Limitations on Provincial Tax Reform Imposed by the Federal-Provincial Tax Collection Agreements

The Federal-Provincial Tax Collection Agreements are formal agreements under which most provinces have pledged to accept the federal government's rules and regulations concerning personal and corporate income taxes. In return, the federal government administers and collects the taxes on behalf of the province. New Brunswick has signed such an agreement. With personal income taxes, New Brunswick has agreed to levy a surcharge on the federal taxes owed by its residents. With corporate income taxes, New Brunswick has agreed to levy its own tax rate against the amount of taxable income as defined by the federal tax provisions. An agreed-upon formula is used to allocate corporate income among provinces, for tax purposes, of corporations operating in more than one province. These agreements severely limit the scope for tax reform within New Brunswick.

The discussion of these issues also emphasizes that New Brunswick inevitably is part of the tax reform process underway at the federal level. The federal government's recent and anticipated changes in personal income tax, corporate income tax, and business transfer tax each mean that New Brunswick is in the midst of tax reform, quite apart from its own actions.

Although provinces are somewhat constrained by these agreements, it is important to remember that the effects of any tax measure may be obtained by using an appropriately designed grant or subsidy. The former are off-budget "tax expenditures", while the latter are visible expenditures in the budget. It may

be desirable to use budgetary expenditures rather than tax expenditures as the former are more visible. From an equity point of view, grants are preferable to the deductions offered, for example, in the Quebec Stock Savings Plan. The monetary benefits would be the same for all investors and would not rise with the investor's marginal tax rate. With expenditures such as grants, New Brunswick has far more freedom to make its own decisions than it has with taxation.

We should also note that even though marginal tax rates are set at the federal level, New Brunswick can still use the PIT to alter the progressivity of its tax structure. Since the PIT is itself more progressive than other types of taxes, a shift in the share of the PIT in New Brunswick's total revenue, will shift the progressivity of the overall structure. To increase the overall progressivity of its tax system, New Brunswick need only raise its PIT tax rate on the federal tax payable and lower the rates of a less progressive tax, such as retail sales tax. With total revenue unchanged, the system will have become more progressive.

In the case of the CIT, provinces must accept the federal government's definitions and rules concerning the tax base, including the definition of what qualifies as a small business, as opposed to a large business. Nevertheless, many provinces have used their freedom to levy a lower rate - and, at times, a rate of zero - on small businesses.

4. Modifications of the Federal-Provincial Tax Collection Agreements

One important modification would be to institute a federal-provincial committee that would have the power to decide upon all changes in the structure of shared taxes. At present, the federal government has sole power to decide upon these changes, and the provinces find out about these changes only through the annual federal budgets. Since federal changes directly affect provincial revenues, it is reasonable that the provinces should be involved more directly in the reform process. Such a committee could consist of Finance Ministers, or it could consist of First Ministers. Since these groups meet regularly, it would be a straightforward matter to include all reform proposals as part of their agenda.

Another modification would be to levy New Brunswick personal income taxes against the taxable income as defined in the federal tax returns. At present, the provinces can only levy their taxes against the federal tax payable. Federal tax payable is a figure entered on the federal return after all federal deductions and exemptions have been calculated and the federal tax rates have been applied. Consequently every federal change to the rate or bracket structure directly impacts upon provincial revenue. The recommended modification would enable each province to decide upon its own rate and bracket structure and would provide for greater freedom for each province. This modification will become of major importance if proposed federal reforms significantly alter the existing rate and bracket structure.

The province could also benefit from greater flexibility in implementing provincial tax credits applicable to provincial tax payable. Such tax credits could be used to assist specific income groups, to stimulate certain economic activities, or to increase aggregate savings and investment. Once again, this modification would give each province much more power to implement its own policies.

All of these modifications could be instituted within the tax collection agreements. This approach is preferable to the opting out alternative for two main reasons: first, the significant administrative and compliance costs associated with separate tax systems; and second, the fact that operating within the agreements helps preserve an important degree of tax harmonization across the provinces.

We believe that these modifications deserve close scrutiny in the context of the current tax reform debate. As indicated in earlier chapters, federal reform proposals will have a major impact on New Brunswick's personal and corporate income taxes. This impact could be much more readily channelled in New Brunswick's best interests if these modifications were instituted.

CHAPTER 8

An Overview of New Brunswick's Reform Options

1. Overview

The major tax reform options being considered at the federal level could, if implemented, automatically alter New Brunswick's tax structure. Therefore, apart from any independent initiatives, New Brunswick is already in the process of tax reform. Indications are that the federal government will reduce the amount of revenue it collects from the personal income tax, by lowering its statutory tax rates. Already, the recent changes in pension contribution limits and in the capital gains exemption will reduce PIT revenue. The federal government has also begun implementing some of its proposals to reform the corporate income tax along the lines proposed in its May 1985 budget. The CIT base will be broadened and the statutory rates will be lowered. More importantly, the federal government is considering eliminating its manufacturers' sales tax and replacing it with a business transfer tax which would be a much larger revenue producer than the MST. The New Brunswick government may wish to participate actively in the national debate concerning these reforms, both to represent the interests of its residents, as federal taxpayers, and also to modify particular reforms in its interest as a member of the Tax Collection Agreements.

└ The federal income tax pension and capital gains reforms are likely to provide relatively more benefits to high income

individuals and high income regions. The progressivity of the personal income tax may thus be reduced. A decrease in the share of total revenue obtained through the personal income tax will further reduce this progressivity. From New Brunswick's perspective, this situation may be of particular concern. Because New Brunswick residents face higher unemployment and lower income per capita than the national average and because some of its regions are economically depressed, equity is likely to be a more important issue than elsewhere. Moreover, a reduction in federal personal income tax revenue will automatically result in a reduction of income tax revenue for New Brunswick unless the provincial PIT rate is adjusted accordingly. Hence, New Brunswick will have to respond in some way to the implementation of lower federal statutory rates.

Federal reform proposals for the corporate income tax will also significantly alter the effective tax rates for all economic activities. Corporations in sectors which benefitted the most from special provisions will pay more federal tax, while corporations that were not eligible to use these will benefit from the lower rates. Because New Brunswick levies its corporate income tax on the taxable income defined using federal rules and definitions, changes to the tax base definition will also affect corporations in terms of their New Brunswick tax payable. Quite likely, these reforms will also alter the total amount of revenue that the New Brunswick government receives from this tax.

The replacement of the federal manufacturers sales tax with a broad based business transfer tax would definitely improve the efficiency of the federal sales tax and provide a less

distortionary mechanism for collecting revenue through lower rates. It is important to note that this could mean a decrease in New Brunswick's retail sales tax revenues, as these taxes currently apply to the price of goods gross of the MST. The effect of this tax change would benefit manufacturing industries that are currently taxed at the high MST rate. On the other hand, a number of economic activities such as the service sector would suddenly become taxable under the BTT. One of the advantages of the BTT is that it would eliminate the implicit taxation of exports. This should be favourable to New Brunswick's natural resource industries which export a considerable portion of their output. However, the overall impact for the New Brunswick economy is unclear.

In the event that a federal BTT is implemented, New Brunswick will have to assess whether it should retain its own separate retail sales tax, or whether it should eliminate this tax and, instead, apply a provincial surcharge to the new business transfer tax. This question will deserve careful consideration in the coming federal reform discussions.

As one of Canada's provinces, New Brunswick must live within the realities of a federation. Tax reform options are limited by the fact that labour and investment can readily shift to other provinces if New Brunswick's tax structure were to differ significantly from that in other provinces. Furthermore, any tax reforms that would entice investment from other provinces would possibly be met with competitive retaliation which could negate any positive results for New Brunswick. As a small open economy, heavily dependent on the United States for its exports and some

of its imports, New Brunswick is also limited in its reform options by the structure of the U.S. tax system.

As a member of the Federal-Provincial Tax Collection Agreements, New Brunswick's freedom to implement tax reforms is restricted by the terms of agreements as well as by economic considerations. In this document, we have focussed on some of the reforms that are, in fact, possible within the Tax Collection Agreements, and we have emphasized the importance of possible modifications in these agreements.

2. Reform Options within the Present Federal-Provincial Tax Collection Agreements

Under current agreements, the New Brunswick government has little freedom to alter the structure of its personal income tax or its corporate income tax. Nevertheless it can institute significant reforms. By raising or lowering its PIT rate on federal tax payable, and making compensating adjustments to provincially controlled taxes, New Brunswick could change the share of its total revenue coming from its PIT. The PIT is its most progressive tax. Consequently, such tax reform could be used to alter the overall degree of progressivity of the New Brunswick tax structure. This does give the New Brunswick government a very important mechanism for equity considerations.

To the extent that the federal government would approve of additional tax credits, New Brunswick could also target new credits at low-income groups if it wished to increase the tax progressivity. This possibility of new tax credits gives New

Brunswick additional scope to reform its tax structure from both the point of view of equity and efficiency considerations.

The provincial government can also alter its CIT rates on large and small business. For instance, by reducing or eliminating its small business tax rate - temporarily or permanently - New Brunswick could seek to encourage the creation and expansion of small businesses so as to increase job opportunities and innovation.

Some observers might also advocate a reduction in the CIT rates for large business. However, a number of factors should be considered in this regard. First, some of the CIT reduction would simply result in a transfer of revenue from the New Brunswick government to the U.S. government (through a reduction in the foreign tax credit). Second, some of the CIT reduction would be a transfer to shareholders and customers living in other jurisdictions. Third, indications are that small businesses are, in fact, more likely to expand and create new job opportunities and innovation than are large corporations.

At the present time, New Brunswick's retail sales tax is applied to a relatively narrow range of products, compared with some other jurisdictions. Several large expenditure categories are excluded from the retail sales tax. An important question is whether the tax base should be broadened to include some of these expenditure categories. Possible new inclusions could be the following: footwear, clothing and electricity to households. An additional issue is whether the sales tax rate of 11 percent is too high. Economic theory suggests that higher rates tend to greatly exacerbate the tax-induced distortions.

Also this high rate may tempt New Brunswick residents to make purchases in nearby jurisdictions with lower tax rates, thereby hurting local businesses. Furthermore, the high rate may also discourage some tourists from spending as much in New Brunswick as they might otherwise. In light of these considerations, a reduction in the sales tax rate may be advocated. Such a rate reduction could even be combined with the base broadening discussed above, so as to yield an unchanged tax revenue.

Another important issue concerning the reform of the retail sales tax is the need to eliminate the taxation of capital goods and producer inputs. Base broadening and lower rates would greatly improve the efficiency of the retail sales tax. Equity concerns could be addressed perhaps more efficiently through other means. For instance, purchases by low-income individuals could be met by exemption of purchases under a certain dollar limit and/or by the introduction of new tax credits in the personal income tax.

From the point of view of administration, New Brunswick's property tax system compares quite favourably to systems in other provinces. The province has responsibility for both the assessment and collection functions. All property is assessed at market value, exemptions are minimal and all taxes are levied on property owners. All people-related services are financed out of general revenue at the provincial level. Nevertheless, there are major areas for reform within the rate structure. For instance, there is no economic rationale for the current rate structure which taxes nonresidential property at a rate 1.5 times that applicable on residential property and provides preferential treatment to owner-occupied property owners. These effective

rate differentials cause resources to be misallocated and are incompatible with both the benefits and ability to pay principles of taxation.

The purpose of the above discussion has been to indicate the range of reform options that the New Brunswick government could introduce within the existing tax collection agreements. Substantial scope does exist for meaningful tax reform.

A basic theme of this document is that tax reform must be considered in the context of expenditure programs. For New Brunswick residents, an important perspective is the total impact of government involvement. A change in one area of government activity, such as tax reform, can be combined with any number of changes in the wide range of policies that are implemented through expenditure programs. Many objectives can be achieved either through tax measures or, alternatively, through expenditure programs. It is important, therefore, to assess which approach is more appropriate given particular circumstances.

Recent research indicates that the costs associated with tax induced misallocation of resources are larger than was previously thought. It appears that special tax measures (for example, accelerated depreciation or inventory tax credits) do generate considerable distortions and result in a wide range of effective tax rates across industries. Furthermore, these measures may not have the desired effects on investment or on savings. An increased awareness of the costs of these distortions and the complexity they generate has led to a general desire to increase the efficiency of the tax system by simplifying it. New

Brunswick should consider this perspective and should aim to improve the efficiency and simplicity of its tax system as part of its reform process.

In conclusion, we would note that reform may best be viewed as a never-ending process. Practical experience will suggest future improvements. Changing social values will lead residents to demand new measures. Changing political alliances will alter the balance of power among competing interests. As time passes, debate about tax reform will invariably continue. Since taxes remove such a large proportion of income from individuals and corporations, tax reform will remain of vital concern to everyone. Hopefully, the analysis within this document may assist New Brunswick residents in their deliberations concerning their present tax options.

Volume

2

THE INSTITUTE FOR RESEARCH ON PUBLIC POLICY

VOLUME II

AN ASSESSMENT OF NEW BRUNSWICK'S TAX SYSTEM

AND RECOMMENDATIONS FOR REFORM

With An Appendix On Provincial Industry

By The Coopers And Lybrand Consulting Group

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The authors would like to thank the New Brunswick Department of Finance for their assistance in developing revenue estimates for current taxes and reform options. The authors would like to thank John Mitsopulos and Rod Hill for their research assistance, and Heather Winship and Linda Willis for their secretarial assistance.

The analyses and views expressed are those of the authors and do not necessarily reflect those of the Institute for Research on Public Policy or the Government of New Brunswick.

JUNE, 1987

FOREWORD

The tax system evolves over time in response to Government's need for revenue and as changing social and economic circumstances dictate. Unlike the expenditure budget, the Legislature does not annually review and approve the tax system in all its detail. Since the tax system is the result of many Government decisions over a long period of time, it is appropriate to occasionally consider the system in its entirety.

This Review of the New Brunswick Tax system provides a thoughtful consideration of taxation in New Brunswick. In addition to many useful observations it contains specific recommendations for reform.

The recommendations are not ones with which the Government necessarily agrees or disagrees. The Government views them as a starting point for public debate.

The recommendations recognize the financial reality that tax changes must not increase the deficit. Consequently, a list of possible tax increases is offered to offset recommendations that, if adopted, would reduce revenues.

Volume I of the Review provides a conceptual overview of the tax reform options open to New Brunswick drawing on the extensive economic literature on the subject of taxation. Volume II focusses more directly on tax issues in New Brunswick. It is this volume that contains recommendations for reform. Chapter XIII of Volume II contains a summary of the Review and its findings.

Volume I is totally the work of the Institute for Research on Public Policy. The main body of Volume II is also their work. However, the Institute was able to draw on the research of the Coopers and Lybrand Consulting Group concerning the impact of selected tax changes on a cross section of provincial industry. The complete Coopers and Lybrand study is appended to Volume II.

I am pleased this research has led to specific recommendations and has confronted the difficult, real world, trade offs between desirable tax concessions and difficult tax increases. The recommendations will aid greatly in the forthcoming public debate, not only concerning reforms to the New Brunswick tax system, but also concerning the provincial response to federal reforms.

Honourable John B.M. Baxter, Q.C.
Minister of Finance

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Chapter I

FISCAL OBJECTIVES AND TRADE-OFFS

1. Introduction

In his 1984 budget speech, New Brunswick's Minister of Finance, The Honourable John B.M. Baxter, Q.C., announced his intention to conduct a tax review:

Mr. Speaker, in any area of endeavour it is a good idea to occasionally step back from the day to day rush of events to evaluate progress and consider the future. This is particularly true of the tax system which goes on from year to year with only occasional changes in rates or exemptions.

Fundamental changes have occurred in the Canadian economy over the past few years which should be taken into account in any review of the tax structure. Our concern in this regard will be with the longer term and the potential that exists in our economy to encourage permanent job creation.

We intend to look at alternative ways of raising the necessary tax revenue bearing in mind considerations of fairness and incentives to economic growth. As well an essential element of the review will be to draw on external advice on how to improve the tax system while not decreasing revenues.

There are a variety of objectives that a tax system can seek to achieve. Our tax review considers these objectives in the specific context of the New Brunswick economy in 1987. The objectives include revenue, economic growth, equity, efficiency, harmonization, and simplicity. These objectives have been defined in general terms in Volume I where they were discussed by reference to the large body of published literature on this subject. Volume II examines the relevance and practicality of each objective in the New Brunswick initiative for tax reform. In addition, Volume II will expand the empirical analysis of the special features of the New Brunswick economy pertinent to understanding the tax base of New Brunswick and the incidence of alternative reforms. Since objectives determine the final set of recommendations, it is appropriate to itemize the major objectives of tax reform and note the importance of each.

In broad principle, any allocative or distributive objective pursued by tax policy can also be achieved by expenditure policy. Thus various constraints on taxation can be avoided by properly designed expenditure policy. To illustrate, whereas Volume II will explicitly address the merits of a Quebec Stock Savings Plan (QSSP)-type investment incentive, and the merits of investment tax credits, and whereas such proposals could possibly be prohibited by the federal government, the report will discuss the alternative approach of provincial grants and loans.

Considerable weight should be given to the argument that expenditure programs, providing direct grants, are better than new tax credits. Reliance on expenditures means that the extent of government assistance is quantified more clearly. The public accounts indicate how much money each firm receives for each purpose. This enhances political accountability to the legislature and the electorate. Furthermore, it brings civil servants directly into the decisions about each grant. For example, investment tax credits would benefit all new economic activity, including new competition for existing New Brunswick firms. The government may wish to restrict such benefits to certain types of activities, and, in particular to those activities where there are no existing New Brunswick firms. Here a system of grants could be targetted more precisely by program administrators. This also leaves the tax system less cluttered, without various tax concessions. Our analyses and recommendations focus on the use of tax concessions to stimulate growth, but the purpose of our recommendations can be achieved through new expenditure programs, if reliance on expenditures is preferred. It is important to note at the outset, however, that the expenditure side of government is not the focus of this report.

Considerable weight must also be given to the administrative feasibility and costs of alternative tax reforms. Our recommendations must be evaluated in the context of a practical assessment of administrative issues. For example, to

what degree will the exemption of business inputs from retail sales tax result in the purchase of items for personal use under the business exemption provisions? How can the taxation of business inputs be avoided while, at the same time, minimizing improper tax evasion? How expensive would necessary audit procedures be? The answers to such administrative questions are beyond the scope of our report and in any case involve a large element of political judgement.

2. Revenue

Government revenue is increased or decreased by changes in tax rates, or by expansion or contraction of tax bases. Our tax review proceeds from the perspective of overall revenue neutrality: if any tax reductions are to be implemented, then equivalent tax increases must also be imposed. This perspective of revenue neutrality permits us to focus on the structural objectives of economic growth, equity, and what might be termed appropriate harmonization or "fiscal fit," that is a set of taxes and tax expenditures appropriate to the special circumstances of the New Brunswick economy, and also consistent with New Brunswick's place in the Canadian federal system.

We must emphasize that a major finding of our tax review is that there is no longer any easy way to increase revenue. Our examination of types of taxes not currently used in New Brunswick has not revealed any attractive possibilities. We recommend that New Brunswick continue to rely on its traditional types of taxes, with perhaps the addition of a broadly based corporate capital tax. This finding provides an additional reason for using a revenue-neutral perspective. Any new tax concessions to stimulate growth or to improve equity must be balanced by increases in other taxes in order to restrain a growth in the deficit and in the province's debt.

3. Growth and Job Creation

For many decades New Brunswick has been beset by serious unemployment due to inadequate private sector investment, and slow economic growth. Therefore, tax reform which could facilitate a movement towards the national average in regard to unemployment rates, participation rates, and GDP per capita, would be particularly welcomed. New Brunswick will have to sustain levels of investment and economic growth above the national average in order to bring its unemployment rate down to the national average. In view of this, the report assesses the present structure of taxes and possible tax reforms in terms of their implications for growth and job creation.

4. Equity

The objective of equity is also central to our analysis. Horizontal equity focusses on equalizing the tax burden of individuals who are in similar circumstances; while vertical equity is concerned with the appropriate differences in tax burden among individuals who have different levels of income, consumption, and wealth. The term "progressivity" refers to the degree to which groups with a higher ability to pay contribute a larger percentage of their income in taxes, in comparison with groups having a lower ability-to-pay. Volume I examined many issues involved in striving for equity. Here we shall analyze the impact of particular New Brunswick taxes and alternative reform options on equity among New Brunswick taxpayers. A major element of subjectivity is involved in anyone's analysis and prescriptions concerning equity. We attempt to isolate the functional matters, allowing the reader to evaluate equity considerations from his or her own perspective.

5. Distortions and Inefficiencies

An important element in both the maximization of growth and also the

pursuit of equity is the minimization of distortions caused by the tax system. Throughout this tax review, the issue of distortions receives considerable analysis. The structure of the retail sales tax is particularly significant in this respect. The taxation of some business inputs means that the retail price of some products already includes retail sales tax even before the retail customer pays the 11 percent on his or her purchases. The variation among products in this cascading of tax means that the tax system is distorting consumer choices by distorting the economic relationship among prices. How to deal with the application of the retail sales tax to business inputs raises a particularly difficult set of issues. Questions of current concern include taxes on building materials, gasoline, motive fuel, consumables used in manufacturing, and labour services for tangible personal property. Apart from these questions of distortions, the New Brunswick government has chosen to exempt certain items such as food, clothing, and footwear from the retail sales tax. These political choices should be re-examined, even though New Brunswick residents may desire to retain their current exemptions. We examine the federal proposal for a new value added tax (VAT) from this perspective. The VAT can eliminate all these distortions, but at the same it may eliminate New Brunswick's right to exempt certain products from the tax.

6. Harmonization

The New Brunswick tax system is integrated with the federal tax system through the constitutional and traditional assignment of taxing responsibilities, as well as through the design of major direct taxes on personal and corporate income explicit in the Federal-Provincial Tax Collection Agreement. Furthermore, New Brunswick is economically integrated with other Canadian provinces and the rest of the world through trade and the mobility of labour and capital. In light of the institutional constraints and the reality

of New Brunswick's small open economy, this report will assess tax reform options in terms of their compatibility with the Tax Collection Agreement and their consequences for provincial competitiveness. Volume I addressed the rationale for interjurisdictional harmonization of taxes, the rationale for tax differentials among governments in a federation, and the express limitations on provincial tax reform imposed by the current Federal-Provincial Tax Collection Agreements. In Volume II, each tax reform option facing New Brunswick will be assessed in terms of its consistency with principles and practices governing the present Canada - New Brunswick Tax Collection Agreement.

7. Federal Tax Reform: Implications for New Brunswick Reform

The federal government has developed a set of proposals for comprehensive tax reform. It is inevitable that these will have significant fiscal consequences for New Brunswick. A basic purpose of this report is to clarify the impacts of federal reform proposals. Our report will draw attention to those reform options likely to have most significance for New Brunswick. This will enable the reader to evaluate the federal reform proposals from New Brunswick's perspective.

The anticipated increased federal reliance on indirect taxation with a new type of sales tax or value added tax (VAT) has three principal motivations in Canadian tax reform. First, direct (income) tax rates and revenues will be reduced by federal reforms, and so a broadly based indirect (consumption) tax would provide an efficient alternative revenue source. Second, the federal Manufacturers' Sales Tax seems destined finally to be dismantled, because it is highly distortionary and inefficient. Third, modern tax reform is being driven to a large extent by the policy position that it is preferable to tax consumption as opposed to income -or at least not to tax business investment.

Such provisions can be conveniently incorporated in a broadly-based indirect sales tax.

In the face of uncertainty concerning the federal position, we will address those provincial taxes most likely to be significantly affected by federal tax initiatives. For example, within the analysis of the New Brunswick sales tax, the report will examine the advantages and disadvantages of coordinating the provincial sales tax with the anticipated federal business transfer tax or VAT. This option is, in our opinion, the most important tax question facing New Brunswick within the forthcoming federal tax reform discussions.

8. Incidence, Shifting, and Indirect Impacts

Chapter XII presents a summary of the Coopers & Lybrand calculations concerning the first stage impact of alternative tax reform options. This study emphasizes that each particular reform would impact different firms differently. Our analyses of each potential tax reform provide indications concerning the average impact. The Coopers & Lybrand study suggests that a wide dispersion of impacts will occur about this average. Even if the average impact of a tax change is favourable, many individuals and firms will nevertheless be hurt, and many will be made worse off than others. Tax reform can involve a re-writing of the society's "social contract", and as such it is a particularly difficult process.

The Coopers & Lybrand study also indicates that New Brunswick tax reforms will have an impact on the amount of federal tax payable by New Brunswick corporations and individuals. The imposition of a capital tax, for example, could reduce corporate income and consequently it will reduce the amount of taxes that New Brunswick corporations must pay to the federal government. This means that a certain increase in New Brunswick revenue from a new capital tax will result in a much smaller increase in total corporate taxes. As much as

one-third of the capital tax revenue will effectively come from the federal corporate income tax.

In our report, we emphasize that there are important additional repercussions of each reform option. A corporation may raise its prices, so that its customers pay part of the tax. A corporation may also reduce the prices that it pays for labour and other inputs, so that its suppliers pay part of the tax. Volume II discusses these probable economic adjustments to alternative tax reform proposals.

9. Personal Income Tax (PIT)

The PIT is an extremely important tax in several respects. It provides a large source of revenue. It has a major influence on private sector economic decisions. Furthermore, as a result of its rate structure, the PIT is able to alter the distribution of income: it can make high-income people pay a larger percentage of their income in tax than is paid by low-income people.

Each New Brunswick taxpayer applies the provincial tax rate, currently 58 percent, to the basic federal tax they have calculated on their federal income tax return. They then send this tax to the federal government which remits it to the New Brunswick government. As a result of this process, New Brunswick saves the administrative costs that it would incur if it had its own separate PIT. However, this federal-provincial tax collection agreement means that New Brunswick revenue will be affected by federal reform proposals. Hence our analysis of the PIT will deal with these impacts.

Possible reforms in other taxes will affect the income distribution within New Brunswick. If current sales tax exemptions were removed for clothing and footwear, for example, low-income people might have to bear a heavier burden than desirable. Similarly, if the homeowner tax credit were eliminated, low-income people might have to bear a heavier burden than desirable. The PIT is

one mechanism through which these undersirable impacts on low-income people can be redressed. A new low-income PIT credit could be designed to make up for the extra retail sales taxes and property taxes that such reforms might levy on low-income people.

10. Corporate Income Tax (CIT)

As with the personal income tax, New Brunswick is significantly constrained in its options with respect to corporate income taxation because the base is defined and the tax is administered by the federal government. Thus, in Volume II, we assess the corporate tax in view of the federal-provincial tax agreement and possible reforms forthcoming from the federal government. These reforms likely will consist of base broadening, elimination of special exemptions and deductions, and lowering of statutory rates. Federal base broadening may take the form of abolishing or at least reducing accelerated depreciation, reducing R&D credits, removing special provisions for mining, eliminating the expensing of soft capital expenditures, removing deductions for provincial capital taxes, and, perhaps, limiting deductions for interest payments. Also, reform of the rate structure could involve the elimination of special reduced rates for manufacturing and processing, small business and slow growth regions. New Brunswick, as a signatory to the Tax Collection Agreement, must apply its corporate tax rate to this new broader base. With the broader base, New Brunswick could lower its provincial tax rate and still receive the same revenue. Furthermore, the province may choose to offset the effect of the loss of these tax preferences on enterprise in New Brunswick through new tax credits.

There is no question that the corporate tax reform options facing New Brunswick are severely limited by the province's participation in the Tax Collection Agreements. Nevertheless, the structural and administrative advantages of the agreements significantly outweigh the costs of the limitations

to a small province. The proper provincial approach ought to be to maximize corporate revenues subject to limitations of the agreements and the competitive pressure of corporate tax rates elsewhere, and to provide employment incentives through carefully targetted grants and/or employment subsidies and tax credits.

Other issues involving provincial taxation of the corporation to be addressed in Volume II include the differential small business rate and the economic and fiscal merits of a capital tax.

11. Sales Taxes

As indicated above, the sales tax involves many complicated questions. In particular, the taxation of business inputs results in a cascading of tax, so that different products bear different rates of tax. Yet to eliminate the taxation of business inputs involves difficult administrative problems. The federal proposal to introduce a new federal value-added tax (VAT) would avoid these problems. New Brunswick could eliminate its current sales tax, and impose a provincial rate as part of the new federal VAT system. That is, New Brunswick could integrate its sales tax with that of the federal government much as it currently does with its PIT. The advantages and disadvantages of this decision are a central focus of our analysis.

If New Brunswick decides to retain its retail sales tax, then certain aspects should be re-considered, particularly the current rate level and the current exemptions.

12. Property Tax

Volume I has discussed the design and administration of the property tax in New Brunswick. It is fiscally appropriate that responsibility for people-related services has been shifted to the provincial level along with assessment and tax collection functions. All properties are fully assessed and erosion of

the tax base is minimal. Nevertheless, it is necessary to examine closely the rate structure of property taxes in order to determine, among other things, the implications of the present residential/industrial classification. The areas for potential reform are related to the current rate structure rather than to the administration of the tax.

The property tax is a relatively less important source of revenue in New Brunswick than it is in other provinces and, indeed, its importance has been decreasing over time. A more equitable and a more efficient property tax could potentially be used to a greater extent as a provincial revenue source and may be an appropriate means to compensate for reductions in other taxes.

13. Payroll Taxes

In Canada, payroll taxes are for the most part mandatory federal levies used to finance insurance schemes such as unemployment insurance and public pension funds. They tend to be regressive because they are generally flat-rate up to a maximum. At the provincial level, the most common payroll tax is the workers' compensation levy. As outlined in Volume I, payroll taxes at the provincial level tend to be particularly inefficient because they are borne mostly by labour, they create distortions for the work-leisure choice, and they interfere with inter-provincial trade. Volume II assesses the economic cost of these distortions in greater detail. The report assesses the merits of an Ontario Health Insurance Plan (OHIP) type payroll tax as an earmarked provincial revenue source, establishing the point that such a fiscal change is of highly questionable relevance for New Brunswick.

14. Marginal Revenue Impacts of Alternative Tax Changes

This report on New Brunswick Tax Reform Options addresses the efficiency and distributional aspects of introducing, dropping, or modifying taxes

currently in the provincial tax structure. The report emphasizes the importance of determining the economic consequences of deriving tax revenue from one tax base as opposed to another, say from sales taxation versus personal income taxation or property taxation. A large part of provincial tax reform options inevitably will entail changes in rates and inclusions/exclusions to the bases. Therefore, it is useful at the outset to identify the revenue impacts of such changes. One may estimate the revenue associated with the marginal percentage point of the rate for various taxes under an assumption that, in each case, the base is not changed by small changes in the rate. This section presents such calculations for the major tax alternatives analyzed in greater detail throughout this report.

The Sales Tax base as currently defined is \$4,500 million (for 1987-88). The rate is 11 percent and the revenue yield is \$497 million. Consequently a marginal point of the sales tax rate - down to 10 percent or up to 12 percent - will cost (or yield) approximately \$45 million assuming no change in the base.

On the other hand, sales tax revenue could be increased by eliminating various exemptions. A convenient way to look at the alternatives is to identify the fiscal cost of the various exemptions. For example, all current exemptions to the New Brunswick sales tax involve a revenue cost -calculated at 11 percent and assuming no rate:base interaction - of \$358 million dollars. As indicated in Table I.I, this is based on 1985-86, the last year for which final data needed to make these estimates are available. In 1987-88 these exemptions in total would be worth about \$413 million. The major components of the exemption schedule are food-at-home, clothing and footwear, electricity, and machinery and equipment.

Similar calculations reveal the marginal revenue impact of rate changes on various bases. For example, an increase of the personal income tax rate by one percentage point, from 58 percent to 59 percent - under an assumption of zero

rate:base interaction - would yield approximately \$8 million dollars of provincial tax revenue in 1987-88. An increase of one percent in the provincial corporate tax rate for large business, from 15 percent to 16 percent, would yield \$4.5 million; for the small business tax base, an increase in the rate from 9 percent to 10 percent would yield \$1.9 million. A personal income tax supplementary flat tax of 1 percent on net income over \$20,000 involves \$35 million.

With respect to the property tax, the relevant types of reforms in view of the present structure involve levelling out of the rates. For example, in 1987-1988, eliminating the provincial residential credit would raise \$66 million while eliminating the local service credit would raise an additional \$19 million; on the other hand, reducing the non-residential rate from \$2.25 per \$100 of assessment, to \$1.50, to bring it in line with the residential rate, would mean foregoing approximately \$23 million.

These types of calculations are necessary in order to estimate the revenue impact of any recommended tax reforms. The opening quotation by the Minister of Finance indicated the need for "advice on how to improve the tax system while not decreasing revenues." This focus on revenue neutrality of any set of recommendations requires the calculation of these revenue impacts.

Table I.1

The Revenue Cost of Various Exemptions to the Sales Tax¹

(in millions of dollars)

	<u>Base</u>	<u>Revenue</u>
1985 Sales Tax Base	3900	429
	<u>Amount</u>	<u>Cost</u>
All Exemptions	3263	358
Tobacco, Gasoline & Motive Fuel	920	101
Food at Home	776	85
Electricity	308	34
Heating Fuel (residential)	153	17
Machinery and Equipment	318	35
Fertilizers and Feed	49	5
Clothing and Footwear	319	35
Service Component (Machinery and Equipment & In-house Repairs)	139	15
Prescription Drugs	65	7
Equipment in Telephone Service	29	3
Equipment in Electricity	34	4

¹The data presented here are for 1985-86 because this is the most recent year for which final data needed to make these estimates are available. It should also be noted that the exemptions listed are those specifically cited in the provincial Social Services and Education Tax Act. There are a great many other services that do not fall under the general taxing provisions of the statute and therefore are not specifically cited as exemptions.

Chapter II

THE NEW BRUNSWICK TAX SYSTEM: AN HISTORICAL OVERVIEW1. The Provincial Expenditure and Revenue System: The Impact of "Equal Opportunity"

At the end of the 1960s, the provincial and local governments agreed to a new comprehensive division of revenue and expenditure responsibilities. This dramatic set of reforms came to be known as "equal opportunity". In examining the tax changes of the past twenty years, we shall begin with a discussion of this important reform period.

In 1966, consolidated provincial/local revenue amounted to \$316.0 million or 26.7 percent of Gross Domestic Product (GDP). In 1970, when all the expenditure and revenue changes arising from the reforms recommended by the Royal Commission on Finance and Municipal Taxation were in place, consolidated provincial/local general revenue amounted to \$483.0 million or 29.6 percent of GDP. This was an increase as a percentage of GDP of 2.9 percentage points during the period. It represents an important expansion by government in the economy in four years.

The growth of consolidated provincial/local government revenue masks the fact that total provincial revenue rose to 27.2 percent of GDP, while the municipal share declined to 2.4 percent during this period. This shift reflects the transfer of responsibility for social policy and some local government functions from the local to the provincial level of government. These were all part of the program for equal opportunity.

The provincial revenue system of that era was revised to incorporate a new retail sales tax, referred to as the "Social Services and Education Tax," increases in the provincial income tax, introduction of a provincial property

tax, and increases in "the gasoline and motive fuel tax." A number of municipal taxes were abolished and the local real property tax was revamped. As well, an unconditional grant system to municipalities was established, which incorporated an equalization component. Provincial own source revenues grew very quickly, because of the imposition of new levies.

To understand why the changes occurred, their size and scope, their philosophy and the economic and social context in which they took place, requires a brief historical review. Although the phrase "Program for Equal Opportunity" was not coined until late 1965, the initiative really began in 1962 when the newly elected Liberal Government, after two years in office, found itself confronting a problem all provincial governments were facing at the time.

Across Canada, municipal expenditures were rising at an unprecedented rate. But municipal revenues, heavily reliant on the property tax, were simply unable to keep pace. Municipalities reacted by turning to provincial coffers for a greater share of provincial revenues, such as the sales tax, the income tax, the gasoline and motive fuel tax, which had a closer relation to provincial economic conditions. But provincial governments were hesitant to loosen the purse-strings. The demand for additional government services had been rising quickly. Faced with this problem, the provincial government appointed a Royal Commission on Finance and Municipal Taxation to make a comprehensive study of the problem. The concept of a cautious patch-work approach, was rejected for several reasons. First and foremost were the very large disparities among municipalities in tax bases, including income levels and property values. As well, great variations persisted in the level and quality of such social services as health, education and welfare.

There was also the complexity and inconsistency of legislation pertaining to municipalities and the provincial grant structure. Further, the municipal revenue system was complex and inequitable. More importantly, it was incapable

of sustaining municipal expenditure requirements. Consequently, the Royal Commission was given broad terms of reference and came up with equally broad recommendations.

The Commission reported in November of 1963 and based its recommendations on the following assumptions: that social and economic progress in the middle of the twentieth century demands that certain social services become provincial responsibilities (these are referred to as education, health, welfare and justice); that every person in the Province should have an "equal opportunity" to these services, regardless of his or her ability to pay; and that provincial financial aid to municipalities should be sufficient to meet the need for local services among communities of similar size, but of different property tax capacity.

To achieve these far reaching objectives, the Report recommended virtually complete reassignment from municipalities to the provincial government of responsibilities for property assessment, and for the administration of education, welfare, health and justice. It advocated a complete reorganization of municipal government; counties would disappear, their functions being transferred to other jurisdictions. New councils would be established, and only age and residence would be required for voting eligibility. The property and poll tax qualifications would be abolished.

Municipal finance would be completely remodeled to eliminate many local taxes, including poll taxes, personal property taxes, and non-resident taxes. Municipal revenues would continue to come from the property tax but would be heavily supplemented (from 40 percent to 70 percent) by unconditional provincial grants. These in turn would be financed by an increased sales tax. The heavy burden of education costs would be borne entirely (100 percent) by the Province. They would be financed in part by a provincial property tax levied on a uniform province-wide assessment of real and business property. The balance would come

from general revenues. Schools would be provincially owned, but administered by local school boards. Local school boards would have no revenue raising responsibility for the standard, province-wide program.

The two most important parts of the legislative program were education and reorganization of municipal government and finance. Thirty-three school districts were to be established to replace the existing 400 plus. New regional high schools and elementary schools were to be built. New uniform and higher teacher salary scales were to be established. A new and more imaginative curriculum, and a new transportation system for pupils was to be provided.

County government would disappear, while cities, towns and villages would function under entirely new legislation. New unconditional grants would be paid to all municipalities, based on a uniform province-wide assessment system. This would relieve the burden of taxation at the local level, and equalize the fiscal capacity of municipalities so that consistent levels of local services could be provided to all citizens, regardless of where they lived in the Province.

In addition to these changes, all health and welfare functions would become a provincial responsibility, along with most functions dealing with the administration of justice.

The municipal revenue structure before equal opportunity was inconsistent, and incapable of meeting expenditure responsibilities. A host of revenue measures were employed to raise necessary funds. The property tax, of course, was the foundation piece. But because assessments were done locally, horizontal equity was poor. In addition to the property tax, revenues were derived from taxes on personal property, on business, on non-resident workers, from poll taxes, special assessments, and from the traditional licenses and permits, fines, rentals and concessions, interest and tax penalties, and recreational and community services. About 50 percent of municipal revenue came from the real property tax, 28 percent from provincial special purpose contributions, and the

balance from the other sources described above, during the period immediately preceding reform. Because of their extensive expenditure responsibilities, municipalities in aggregate had been running deficits for a number of years.

As already noted, responsibility for the major social services of education, health, welfare and justice was transferred to the provincial government, along with services to unincorporated areas. As well, the assessment function and property tax collection function were centralized. The net effect was to shift about 65 percent of local spending to the provincial government.

Assumption by the provincial government of major expenditure responsibilities formerly those of municipalities meant new policies, programs and organizations. It also meant new sources of revenue. These were needed to finance the transfer of the base level of expenditure responsibility. As well new revenue was required to finance the net new cost of the unconditional grant system, the added debt burden, and the net increase in spending required to equalize social service provision throughout the Province.

Revenues needed for education were obtained by a uniform province-wide tax on real property at a rate of \$1.50 per \$100 of assessment at market value, effective January 1, 1967. The new Social Services and Education Tax Act was introduced effective January 1, 1967, at a rate of 6 percent. The base was broadened in 1968, to include hotel and motel accommodations and telecommunications. The rate was raised to 8 percent in 1969-70, and the base broadened to include dry cleaning and laundry. The gasoline tax was raised by one cent a gallon in 1968-69 and again in 1969-70. Tobacco taxes were raised in 1969-70. Liquor prices were raised in 1969-70. A 10 percent surtax was imposed on personal income tax in 1969-70.

The net effect of these changes on the consolidated provincial/local expenditure and revenue ratios before and after reform is shown in Table II.1.

It should be noted that the comparison is between the years ending December 31, 1966 and 1970, to include all major revenue and expenditure changes made during the period immediately following introduction of the Program of Equal Opportunity on January 1, 1967.

TABLE II.1
PERCENTAGE DISTRIBUTION OF PROVINCIAL/LOCAL
EXPENDITURES AND REVENUES, 1966 AND 1970

	Percentage Distribution	
	<u>1966</u>	<u>1970</u>
Total Provincial Expenditures	74.1	91.2
Total Municipal Expenditures	<u>25.9</u>	<u>8.8</u>
	<u>100.0</u>	<u>100.0</u>
Total Provincial Revenues	73.5	95.8
Total Municipal Revenues	<u>26.5</u>	<u>4.2</u>
	<u>100.0</u>	<u>100.0</u>

Source: Annual Reports on Municipal Statistics, 1966, 1970.
: Public Accounts of New Brunswick, 1966-67, 1970-71.

2. The Provincial Revenue System Immediately Following "Equal Opportunity"

The base for the provincial revenue system had undergone major changes during the reform process, in the form of additional own source revenue levies. Table II.2 presents the basic structure of the provincial revenue system before and after reform.

TABLE II.2

DISTRIBUTION OF REVENUE SOURCES
GOVERNMENT OF NEW BRUNSWICK
1965-66 AND 1969-70

	<u>1965-66</u>	<u>1969-70</u>
<u>Own Source Revenue</u>		
Personal Income Tax	6.0	9.5
Corporate Income Tax	4.4	2.8
Provincial Real Property Tax	-	7.5
Municipal Real Property Tax	-	3.4
Social Services and Education Tax	9.3	14.3
Motive Fuels Tax	12.9	8.1
Other	2.7	1.9
Total Own Source - Taxes	<u>35.3</u>	<u>47.6</u>
<u>Revenues from Canada</u>		
Equalization	19.2	22.2
Atlantic Provinces Adjustment Grant	6.7	-
Conditional Grants	17.9	15.1
Other	2.8	2.5
TOTAL: REVENUES FROM CANADA	<u>46.6</u>	<u>39.8</u>
TOTAL GROSS ORDINARY REVENUE	<u>100.0</u>	<u>100.0</u>

Source: Department of Finance

The above table indicates that the municipal reform process shifted reliance from the corporate income tax and motive fuel tax to the personal income tax, the real property tax, and the social services and education tax. As well, rapid growth of equalization revenues during the period provided the provincial government with additional revenues for general purposes. Reliance on conditional grants declined.

In global terms, the effect of reform was to shift the burden of taxation from municipalities to the province, and reduce the relative importance of federal transfers to the Province, though they continued to represent a substantial portion of gross ordinary revenue.

The above distributional analysis does not reveal the very rapid growth of both own source revenues and revenues from Canada during this period. By chance, reform accompanied a buoyant economy which further augmented revenue growth, although the structural changes may have increased elasticity of the system. For example, increasing reliance on the sales tax and personal income tax may have augmented future revenue potential.

3. Revenue Sources: Comparisons over Time and Among Provinces

In Volume I, we presented tables indicating the percentage of total provincial revenue that the New Brunswick government receives from each type of tax. These tables presented the percentage of revenue sources for each province for 1985-86 and for 1970-71. For New Brunswick, a very important set of reform options consists of possible changes in this tax mix, and so we are repeating these tables here, as Tables II.3 and II.4, for ready reference as one reads the remainder of this volume. As indicated in Volume I, the choice of tax mix varies greatly among Canadian provinces. And for several provinces, it has varied greatly over the fifteen year period, 1970-71 to 1985-86. For example, the share of total revenue obtained from the personal income tax has varied from a low of 4.6 percent in Prince Edward Island in 1970-71 to a high of 27.0 percent in Quebec in 1985-86. The share of total revenue obtained from retail sales taxes (including tobacco) has varied from a low of 0.7 percent in Alberta in 1985-86 to a high of 19.3 percent in Ontario in 1985-86.

Within New Brunswick, we can see significant shifts over the fifteen year period. As a share of total provincial revenue, the personal income tax rose

from 9.8 percent in 1970-71 to 14.6 percent in 1985-86. And the retail sales tax rose from 15.5 percent to 17.3 percent.

One of the options available to New Brunswick in the context of tax reform is that of altering the share of its total revenue obtained from each type of tax. From this perspective, it is therefore important to examine carefully the impacts of each type of tax and assess how these can be used most efficiently in pursuing various economic objectives. We hope to clarify the advantages and disadvantages of each type of tax, so as to facilitate the debate over this important issue of the appropriate tax mix.

When comparing New Brunswick's current tax mix with that of other provinces, it can also be instructive to focus on own-source revenues. Much of our analysis in later Chapters takes this perspective. Consequently, we have calculated the percentage of own-source revenues obtained from each type of tax. These data for 1970-71 are presented in Table II.5, and for 1985-86 are presented in Table II.6.

4. The Impact of Tax Changes since 1970

Underlying the shift in the tax mix between 1970-71 and 1985-86, are a long list of changes in tax rates and tax bases. It is to these changes that we now turn. In Table II.7, we list each major increase, and the revenue impact of each is calculated. Increases have been implemented in a wide variety of taxes.

Within the retail sales tax ("the social services and education tax"), the previous exemption on building materials was eliminated in 1978; the tax base was broadened to include services to tangible personal property in 1983; the meal exemption was lowered from \$3.00 to \$1.00 in 1985; and the rate was raised from 8 percent to 10 percent in 1983 and to 11 percent in 1985.

TABLE 11.3

Sources of Total Gross General Provincial Revenue, Fiscal Year 1970-71

(% of total revenue, including transfers from other levels of government)

Sources	NTLD	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Personal Income Tax	6.9	4.6	9.7	9.8	24.4	18.1	19.3	12.9	16.1	17.6	18.5
Corporation Income	2.7	1.3	2.6	2.1	4.6	9.1	5.8	3.4	5.4	5.8	6.2
Sales*	12.3	11.1	14.8	15.5	18.7	15.8	13.8	13.0	1.3	16.0	15.2
Motive Fuel	6.2	7.0	8.6	7.1	7.9	8.3	7.8	9.1	7.9	6.2	7.9
Hospitalization Insurance and Medicine Premiums	--	--	--	--	0.8	12.4	5.1	3.4	4.8	5.9	6.1
Succession duties	--	--	--	--	1.2	1.5	--	--	--	1.4	1.0
Other tax Revenue**	0.6	0.2	0.4	0.4	1.9	0.5	0.9	0.6	0.8	0.5	0.9
Permits Privileges, Licenses	3.8	2.2	3.4	4.6	6.1	6.3	4.7	10.8	29.8	16.5	8.9
Other Own-Source Revenue***	5.7	12.1	13.3	13.1	5.2	10.9	9.6	18.3	10.5	12.6	9.7
Total											
Unconditional Transfers	29.1	27.9	21.4	20.4	20.2	0.8	8.4	8.1	1.8	0.1	9.1

...continued...

TABLE 11.3 (continued)

Sources of Total Gross General Provincial Revenue, Fiscal Year 1970-71

(% of total revenue, including transfers from other levels of government)

Sources	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	TOTAL
Total											
Conditional Transfers	33.2	33.6	25.6	26.9	9.0	16.5	23.7	20.4	21.6	17.5	1.5

Source: Calculations from - Provincial and Municipal Finances, 1970-71. Table 3-1, p. 26. Canadian Tax Foundation, Toronto, 1972.

*Provinces differ in the diversion of property tax revenue between provincial and municipal government

**including tobacco

***including corporation (non-income) - except Ontario

*Note: Property tax is included in "other non-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

TABLE 11.4

Sources of Gross General Provincial Revenue, Fiscal Year 1985-86*

(% of total revenue, including transfers from other levels of government)

Sources	Nfld	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Personal Income Tax	11.8	11.5	19.1	14.6	27.0	25.7	17.4	16.6	11.3	19.9	21.7
Corporation Income	2.6	1.7	2.9	3.1	1.6	7.0	3.3	3.4	4.9	3.1	4.0
Sales**	17.4	16.2	17.0	17.3	12.3	19.3	12.7	11.5	0.7	15.9	13.3
Motive Fuel	3.1	3.4	4.3	4.1	3.5	4.1	4.4	0.8	0.03	4.2	3.2
Health Insurance Premiums and Taxes	--	--	--	--	5.1	5.6	--	--	1.4	3.3	3.7
Social Insurance levies†	1.4	1.0	1.2	1.7	2.5	3.5	1.1	1.9	1.8	4.6	2.7
Other tax Revenue	1.0	0.7	0.7	0.6	3.8	2.8	5.6	3.3	0.8	1.8	2.7
Permits Privileges, Licenses	2.7	1.6	1.6	1.4	2.8	2.7	1.1	1.7	0.9	2.2	2.2
Natural Resource Revenues	1.4	0.3	0.6	0.9	0.4	0.8	1.8	18.2	38.5	7.1	7.3
Liquor Board Profits	1.7	2.1	3.6	2.5	1.2	2.2	3.4	2.2	2.2	3.1	2.1
Return on Investments	7.4	8.5	6.8	4.5	9.6	6.7	11.5	18.8	23.0	8.3	10.7

...continued...

TABLE 11.4 (continued)
Sources of Gross General Provincial Revenue, Fiscal Year 1985-86*

(% of total revenue, including transfers from other levels of government)

Sources	Nfld	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Sales of Goods and Services	2.7	3.1	3.7	1.3	1.7	2.0	5.0	3.6	1.3	2.9	2.2
Other Own-Source Revenue**	0.5	3.9	0.2	4.2	7.3	1.0	5.6	0.6	3.2	6.3	3.9
Total Unconditional Transfers	29.2	29.4	20.7	23.7	9.1	0.6	12.7	0.7	1.5	0.3	6.2
Total Conditional Transfers***	17.3	16.9	17.9	19.9	12.2	15.8	14.3	16.8	8.5	17.0	14.0

Source: CANSIM MATRICES 2751-63, April 23, 1987.

*Current and capital income combined

**including tobacco and alcoholic beverages excise taxes

***includes contributions to pension plans - including the Quebec Pension Plan

****includes transfers from municipal governments

*Note: Property tax is included in "other own-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

TABLE 11.5

Sources of Gross General Provincial Revenue, Fiscal Year 1970-71

(\$)

Sources	Nfld	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
PIT	18.3	11.9	18.3	18.6	34.5	21.9	28.4	18.0	21.0	21.4	24.9
CIT	7.1	3.4	4.9	4.0	6.5	11.0	8.5	4.8	7.0	7.0	8.3
Sales Tax	32.3	28.8	27.9	29.4	26.4	19.1	20.3	18.2	1.7	19.4	20.4
Motive Fuel	16.4	18.2	16.2	13.5	11.2	10.0	11.5	12.7	10.3	7.5	10.6
Hospital Insurance & Medical Premiums	--	--	--	--	1.1	15.0	7.5	4.8	6.3	7.2	8.2
Succession Duties	--	--	--	--	1.7	1.8	--	--	--	1.7	1.3
Other Tax Revenues	1.6	0.5	0.8	0.8	2.7	0.6	1.3	0.8	1.0	0.6	1.2
Permits, Privileges, Licenses	10.1	5.7	6.4	8.7	8.6	7.6	6.9	15.1	38.9	20.0	12.0
Other Own- Source Non- Tax Revenue	14.3	31.4	25.1	24.8	7.3	13.3	14.1	25.6	13.7	15.3	13.0

Note: *Property tax is included in "other own-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

TABLE 11.6

Sources of Gross General Provincial Revenue, Fiscal Year 1985-86

(%)

Sources	NTD	PKI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
PIT	22.1	21.4	31.1	25.9	34.3	30.7	23.8	20.1	12.6	24.1	27.2
CIT	4.9	3.2	4.7	5.5	2.0	8.4	4.5	4.1	5.4	3.7	5.0
Sales Tax	32.5	30.2	27.7	30.7	15.6	23.1	17.4	13.9	0.8	19.2	15.7
Motive Fuel	5.6	6.3	7.0	7.3	4.4	4.9	6.0	1.0	0.03	5.1	4.0
Hospital Insurance & Medical Premiums	--	--	--	--	6.5	6.7	--	--	1.6	4.0	4.6
Social Insurance Levies	2.6	1.9	2.0	3.0	3.2	4.2	1.5	2.3	0.2	5.6	3.4
Other Tax Revenues	1.9	1.3	1.1	1.1	4.8	3.3	7.7	4.0	0.9	2.2	3.4
Permits, Privileges, Licenses	5.0	3.0	2.6	2.5	3.6	3.2	1.5	2.1	1.0	2.7	2.8
Natural Resource Revenues	2.6	0.6	1.0	1.6	0.5	1.0	2.5	22.1	42.8	8.6	9.1
Liquor Board Profits	3.2	3.9	5.9	4.4	1.5	2.6	4.7	2.7	2.4	3.7	2.6
Return on Investments	13.8	15.8	11.1	8.0	12.2	8.0	15.8	22.8	25.6	10.0	13.4

...continued...

TABLE 11.6

Sources of Gross General Provincial Revenue, Fiscal Year 1985-86

(%)

Sources	Nfld	PEI	NS	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Sale of Goods and Services	5.0	5.8	6.0	2.3	2.2	2.4	6.8	4.4	1.4	3.5	3.4
Other Own-Source Revenue*	0.9	7.3	0.4	7.5	9.3	1.2	7.7	0.7	3.5	7.7	4.9

Note: *Property tax is included in "other own-source" revenue because of difficulties of interprovincial comparisons due to differing roles of municipal taxation.

Within the corporate income tax, the large business rate was raised from 10 percent to 12 percent in 1977, from 12 percent to 14 percent in 1981, and from 14 percent to 15 percent in 1984.

Within the personal income tax, a negative surtax was removed in 1982. The provincial rate levied against federal basic tax was raised from 55.5 percent to 58.0 percent in 1983.

Within the property tax, the base has been broadened to include things such as public utilities, and second units of duplexes.

The gasoline tax ad valorem rate was raised from 16 percent to 20 percent in 1983. The tobacco tax ad valorem rate was raised from 34 percent to 50 percent in 1983.

The impact of all tax increases since 1970 has been to raise total provincial revenue in 1986-87 to a level \$402 million higher than revenue would otherwise have been.

In Table II.8, we list each major tax decrease, and we calculate the revenue impact of each. Again, we see that tax decreases have been implemented in a wide variety of taxes.

Within the retail sales tax, the most significant decrease was the exemption for purchases of clothing and footwear, introduced in 1974.

Within the corporate income tax, small businesses were granted a lower rate than large businesses as of 1977, and in 1984 even this lower rate was temporarily suspended for one year. In 1985, it was effectively lowered to about 5 percent for firms whose active business income is \$110,000 or less.

The total revenue impact of all tax decreases has been to reduce 1986-87 provincial revenue \$128.8 million below the level it would otherwise have been.

5. The Tax Mix in New Brunswick

Tables II.3 - II.6 reveal the tax mix of New Brunswick and other provinces

for 1970-71 and 1985-86. The principle tax revenue sources in New Brunswick are personal income taxation and the provincial retail sales tax. In 1985-86, these two contribute 14.6 percent and 17.3 percent respectively of total provincial revenue or 25.9 and 30.7 percent respectively of own-source revenues. These proportions are similar to Nova Scotia but, in comparison to the aggregate of Canadian provinces, New Brunswick relies slightly less on personal income tax and substantially more on the retail sales tax. The comparison with all Canadian provinces is of limited relevance because of the diversity of provincial tax structures across the country. Nevertheless, on the basis of province-to-province comparisons, it is interesting to note for example that richer provinces such as Ontario and British Columbia rely relatively less on the retail sales tax than New Brunswick does; Ontario obtains 23.1 percent of own-source revenue from sales tax and, for British Columbia, 19.2 percent. On the other hand, the smaller, less well-off provinces of Prince Edward Island and Newfoundland rely substantially more on their provincial sales taxes; P.E.I. derives 30.2 percent of its own-source revenue from retail sales tax while Newfoundland derives 32.5 percent.

This observation is explained for the most part by the relatively low levels of income in New Brunswick. This factor limits the amount of revenue that New Brunswick can derive from the current rate and base structure of the personal income tax, in comparison with other provinces.

For the total of all provinces, personal income tax revenue to sales tax revenue is in the ratio of 2-to-1. Newfoundland, Prince Edward Island and New Brunswick are the only provinces in which this ratio is less than 1-to-1, that is more revenue is derived from the sales tax than from the personal income tax. While these aspects of the provincial tax revenue mix are not necessarily inappropriate at present, they are nevertheless a source of some concern in view of the fact that the federal tax reform initiative calls for an expanded federal

role in indirect taxation. The requirement for provincial adjustment can be expected to be correspondingly greater where provincial retail sales taxes play the largest role.

Another important point to observe in these comparative figures is that New Brunswick derives more - on a relative basis - of its provincial revenue from federal government transfers than neighbouring Nova Scotia¹, and substantially more than the average of other provinces. However, this fact owing to New Brunswick's status as a poorer province ought not to distort the statistical picture of provincial tax effort. For example, although New Brunswick derives only 14.6 percent of its total revenue from the personal income tax, versus a Canada-wide provincial average of 21.7 percent, on the basis of own-source revenue (i.e., net of transfers) New Brunswick derives 25.9 percent of its revenue from the personal income tax versus the national-provincial average of 27.2 percent. The differential drops from approximately 7 percentage points to less than 2. With respect to the retail sales tax, the differential runs the other way and thus when scaled to own-tax revenues, New Brunswick sales tax is 30.7 percent of own-revenue (17.3 percent of total) versus 16.7 percent amongst all provinces (13.3 percent of total). Many additional considerations must be raised in detailed assessment of these comparative figures, including such fiscal facts as that New Brunswick does not impose a health insurance levy, it has a relatively small corporate sector, and it has a relatively small taxable natural resource base.

6. The Revenue Objective

A major change in the economic environment that is important for tax reform has been the growth of provincial expenditure responsibilities since the 1960s. This has been in part due to increased government involvement in the provision of health care and post secondary education. It has also been in part due to

the increased need at the provincial and municipal level for a deeper infrastructure to service urban development and economic growth. The equal opportunity program initiated in the 1960s also added to the demand for provincially-provided services. The historical tendency for income tax payments to increase more quickly than taxpayer incomes was substantially reduced when the income tax system was indexed for inflation in the mid-1970s, substantially eroding that revenue base. At the same time, some expenditures were indexed to grow with the rate of inflation.

These factors required New Brunswick to engage in ongoing tax reform in order to increase revenues in line with expenditures. This ongoing tax reform was achieved by obtaining access to new tax bases, broadening existing bases, and raising the tax rates on them. Further developments along these lines are now limited and subject to diminishing returns. Assistance from the federal government is also diminishing as the latter tries to reduce its deficit through reductions to rates of increase in payments for equalization and the financing of health & post-secondary education.

Table II.9 is important from this perspective. It presents an interprovincial comparison of tax rates as of April 1987. New Brunswick's PIT rate of 58 percent is the second highest rate in Canada (with the exception of Quebec), surpassed only by Newfoundland's rate of 60 percent. New Brunswick's rate is substantially higher than that of several other provinces, such as Alberta at 46.5 percent, British Columbia at 51 percent, and Ontario at 50 percent. Some provinces do impose surtaxes on these PIT rates, thereby increasing the total revenue that they derive from the PIT. New Brunswick's corporate income tax rate of 15 percent is the same as three other provinces. While Newfoundland, Manitoba, and Saskatchewan do have higher rates, these are only slightly higher, at 16 percent, 17 percent, and 18 percent respectively. New Brunswick's general small business rate of 9 percent is very close to the

10 percent rate of six other provinces. The retail sales tax rate of 11 percent is second highest in Canada, surpassed only by Newfoundland at 12 percent. This rate is far above the sales tax rates in several other provinces. Excise taxes on gasoline, diesel fuel, and tobacco are somewhat lower than the rates in some other provinces. The only tax where New Brunswick rates seem to be significantly lower than elsewhere is the property tax, principally due to the homeowner tax credit.

Measures to increase the rate of economic growth will increase tax revenue that can be obtained from current rates and bases. Hence these measures are important from the perspective of tax revenue as well as job creation. This set of issues will be the focus of Chapter IV.

TABLE II.7

36

ESTIMATED IMPACT OF TAX INCREASES SINCE 1970

(\$Millions)

Tax Increases & Date Introduced	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87
<u>Social Services and Education Tax</u>											
*Elimination of Building Materials Tax Exemption (April 1978).....	--	--	17.8	21.7	21.0	21.3	23.0	26.5	29.2	31.3	33.0
*Application to Ready Mix Concrete & Asphalt (April 1979)	--	--	--	1.2	1.1	1.0	1.0	1.3	1.3	1.4	1.4
*Vendors (April 1979).....	--	--	--	1.1	1.1	1.2	1.3	1.8	2.1	2.2	2.2
*Railway Rolling Stock (May 1982)	--	--	--	--	--	--	1.0	1.0	1.1	1.2	1.2
*Rate Increase (8-10% May 1983)...	--	--	--	--	--	--	--	51.3	69.7	72.0	79.2
*Service Related Tax (May 1983)...	--	--	--	--	--	--	--	20.1	23.1	24.6	28.0
*Laundry & Drycleaning (May 1985)	--	--	--	--	--	--	--	--	--	0.6	1.0
*Thermal Insulation (May 1985)...	--	--	--	--	--	--	--	--	--	3.0	3.8
*Lowering Meal Exemption from \$3.00 to \$1.00 (May 1985).....	--	--	--	--	--	--	--	--	--	5.0	6.4
*Rate Increase (10-11% May 1985)	--	--	--	--	--	--	--	--	--	30.0	39.6
<u>Corporate Income Tax</u>											
*Large Business 10-12% (Jan/1977)	0.3	4.2	2.7	7.8	6.8	7.0	5.2	6.1	6.6	8.4	8.1
*Large Business 12-14% (Jan/1981)	--	--	--	--	0.5	7.0	5.2	6.1	6.6	8.4	8.1
*Large Business 14-15% (Jan/1984)	--	--	--	--	--	--	--	0.5	3.3	4.2	4.0
<u>Personal Income Tax</u>											
*Removal of Negative Surtax (January 1982).....	--	--	--	--	--	1.4	16.7	17.8	19.4	20.1	22.1
*Rate Increase (55.5% to 58.0%) (January 1983).....	--	--	--	--	--	--	1.2	14.6	15.9	16.4	18.1
<u>Property Tax</u>											
*Utility Tax (January 1977).....	--	10.0	11.6	12.4	13.2	13.6	13.3	12.8	13.4	14.3	15.2
*40% Rate on Unincorporated Residential Property (Jan/1978)	--	--	2.6	3.8	4.1	4.4	5.1	5.4	6.1	6.9	7.7
*40%-65% on Unincorporated Residential Property (Jan/1984)	--	--	--	--	--	--	--	1.0	3.8	4.3	4.8
*Tax on Second Unit of Duplex (January 1979).....	--	--	0.3	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5
*Woodlands (January 1977).....	--	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5
*2% Levy on Municipal Assessments (January 1984).....	--	--	--	--	--	--	--	0.5	1.6	1.6	1.6
<u>Gasoline Tax</u>											
*Limited Exemptions (April 1978)...	--	--	--	--	--	--	--	--	--	--	--
*Motive Fuel 5.1¢ to 6.0¢ per Litre (April 1979).....	--	--	--	1.5	1.7	--	--	--	--	--	--
*Ad Valorem Rate (April 1981).....	--	--	--	--	--	12.8	25.6	--	--	--	--
*Ad Valorem Rate Increase (16% to 20%) (May 1983).....	--	--	--	--	--	--	--	47.4	51.0	61.0	50.0
*Elimination of Exemption for Fuels Used by Municipalities in their Vehicles (January 1986)...	--	--	--	--	--	--	--	--	--	0.4	2.5
<u>Tobacco Tax</u>											
*0.4¢/Cig. to 0.7¢/Cig. Cut Tobacco to 8¢/oz. (April 1978)...	--	--	5.8	5.5	5.8	5.3	5.4	5.0	4.7	4.5	4.7
*0.7¢/Cig. to 1.0¢/Cig. Cut Tobacco to 10¢/oz. (April 1979)	--	--	--	5.5	5.8	5.3	5.4	5.0	4.7	4.5	4.7
*Ad Valorem - 34% of Pre-Tax Selling Price (April 1981).....	--	--	--	--	--	9.6	13.9	--	--	--	--
*Ad Valorem - 34% to 50% (May/83) (Includes Change to 34% ad valorem)	--	--	--	--	--	--	--	27.8	31.5	38.6	48.1
<u>Property Transfer Tax (May 1983)</u>											
Insurance Premium Tax.....	--	--	--	0.9	1.3	1.3	1.2	1.3	1.3	1.3	1.3
*Fire Marshall's Tax (Expansion of Base (May 1983).....	--	--	--	--	--	--	--	0.1	0.1	0.1	0.1
<u>Amusement Tax (\$100 Fee for Amusement Devices (May 1986)</u>											
	--	--	--	--	--	--	--	--	--	--	0.5
TOTAL: TAX INCREASE	0.3	14.9	41.6	63.2	64.4	93.4	126.9	255.4	301.1	371.1	402.2
CUMULATIVE TAX INCREASE	0.3	15.2	56.8	120.0	184.4	277.8	404.7	662.2	963.4	1,334.6	1,736.8

NOTE: Other tax increase: Metallic Minerals Tax - shifted to ad valorem rate (April 1977) but due to the volatile nature of the tax, the value has not been estimated.

TABLE 11.8

ESTIMATED IMPACT OF TAX DECREASES SINCE 1970

37

(\$Millions)

Tax Decreases and Date Introduced	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87
<u>Social Services and Education Tax</u>									
*Exemption of Building Materials (December 1970).....	--	--	--	--	--	--	--	--	--
*Building Materials Exemption Discontinued but Insulation Exemption Retained (April 1978) (Eliminated May 1985).....	0.2	0.3	0.3	0.4	0.3	0.6	0.6	--	--
*Mobile Homes (August 10, 1973) ¹	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
*Used Mobile Home Exemption (April 1981)...	--	--	--	0.4	0.4	0.5	0.5	0.6	0.6
*Prepared Meals Exemption to \$2 (March/74)	1.0	1.2	1.3	--	--	--	--	--	--
*Prepared Meals exemption to \$3 (April/81)	--	--	--	2.9	3.1	4.1	4.3	--	--
*Adult Clothing and Footwear Exemption (March 1974).....	16.2	17.7	19.9	21.2	22.2	29.1	30.1	34.0	35.1
*Status Indians Exemption (March 1974)....	1.2	1.4	1.5	1.6	1.7	2.3	2.6	2.8	2.9
*Drycleaning Exemption (March 1975).....	0.5	0.5	0.5	0.6	0.7	0.9	1.0	--	--
*Exemption for Repair Equipment & Machinery	--	--	--	0.1	0.1	0.1	0.1	0.1	0.1
*Woodburning Devices (April 1981).....	--	--	--	0.3	0.3	0.4	0.4	0.5	0.6
*Miscellaneous ²	0.1	1.0	1.0	1.0	1.0	1.3	1.4	1.5	1.8
<u>Property Tax</u>									
*Provincial Property Tax 4-Year Phase-Out (Jan. 1975)(Owner-Occupied Residential)...	41.6	45.7	51.2	52.3	55.4	59.1	60.1	67.2	76.4
*Property Tax credit (January 1974).....	--	--	--	--	--	--	--	--	--
*Rebate to Renters.....	--	--	--	--	--	--	--	--	--
*Reduction of Business Tax (January 1978 and January 1979).....	0.9	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.0
*Miscellaneous ²	--	--	--	0.2	0.2	0.2	0.4	0.4	2.2
<u>Personal Income Tax</u>									
*Three Year Phase-In of 5.5% (Jan. 1, 1976; Jan. 1, 1978 1.5%; Jan. 1, 1979 2.5%) (Removed May 1982).....	7.1	11.3	12.4	14.6	--	--	--	--	--
<u>Corporate Income Tax</u>									
*9% Rate for Small Business (January 1977)...	2.2	5.8	6.3	9.5	2.3	0.5	0.6	0.8	1.7 ⁴
*9% to 0% (January 1984).....	--	--	--	--	--	0.8	4.7	--	--
*Tax Credit for Small Business (Jan. 1986)...	--	--	--	--	--	--	--	0.3	3.5
<u>Gasoline Tax</u>									
*Propane - 23% to 13% (May 1982).....	--	--	--	--	0.2	0.2	0.2	0.2	0.2
*Refund to Truckers.....	--	--	--	--	--	--	--	--	0.4
*Shrinkage Allowance.....	--	--	--	--	--	--	--	--	0.2
<u>Miscellaneous²</u>									
*Succession Duties and Gift Tax (December 31, 1973).....	1.9	--	--	--	--	--	--	--	--
TOTAL: TAX DECREASES	73.1	86.3	96.0	106.8	89.7	103.0	109.9	110.5	128.8
CUMULATIVE TOTAL	338.2	424.5	520.5	627.3	710.0	820.0	929.9	1,040.4	1,168.2

¹Mobile homes (with furnishings) moved to 6% and unfurnished moved to 4% in April of 1978.²Includes - Sales tax exemption on microfilm (March 15, 1974);

- Increase in basic sales tax exemption (11¢ to 25¢);
- Increase in exemption for candles and confections (25¢ to 35¢ to 61¢);
- Exemption on equipment designed for paraplegics;
- Greenhouse plastic;
- Medicaments for animals (over-the-counter);
- Exemption for chemicals used in drycleaning May 1, 1986
- Extension of exemption for equipment used by the disabled to any purchases, May 1986.

³Includes extending widows exemption to all persons, vacant home credit. Widows exemption changed to a low income property owner credit May 1986⁴Due to 30% of total attributed to small business resulting from cumulative \$1,000,000 account being removed and small rate applying to first \$200,000 for all businesses. This was a federal move but had provincial implications.

TABLE II.8 (Continued)

ESTIMATED IMPACT OF TAX DECREASES SINCE 1970

(\$Millions)

38

<u>ax Decreases and Date Introduced</u>	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
<u>Social Services and Education Tax</u>								
Exemption of Building Materials (December 1970).....	1.0	8.1	9.5	12.2	13.3	15.4	16.8	16.8
Building Materials Exemption Discontinued but Insulation Exemption Retained (April 1978) (Eliminated May 1985).....	--	--	--	--	--	--	--	--
*Mobile Homes (August 10, 1973) ¹	--	--	--	1.0	1.4	1.2	0.7	0.1
*Used Mobile Home Exemption (April 1981)...	--	--	--	--	--	--	--	--
*Prepared Meals Exemption to \$2 (March/74).....	--	--	--	--	0.7	0.8	0.9	1.0
*Prepared Meals exemption to \$3 (April/81).....	--	--	--	--	--	--	--	--
*Adult Clothing and Footwear Exemption (March 1974).....	--	--	--	--	12.8	13.7	14.4	15.4
*Status Indians Exemption (March 1974).....	--	--	--	--	0.6	0.7	0.8	0.9
*Drycleaning Exemption (March 1975).....	--	--	--	--	--	0.3	0.4	0.4
*Exemption for Repair Equipment & Machinery.....	--	--	--	--	--	--	--	--
*Woodburning Devices (April 1981).....	--	--	--	--	--	--	--	--
*Miscellaneous ²	--	--	--	--	--	--	--	--
<u>Property Tax</u>								
*Provincial Property Tax 4-Year Phase-Out (January 1975).....	--	--	--	--	1.4	7.1	15.4	29.1
*Property Tax credit (January 1974).....	--	--	--	--	6.8	7.5	7.0	4.5
*Rebate to Renters.....	--	--	--	--	0.8	0.9	0.9	0.8
*Reduction of Business Tax (January 1978 and January 1979).....	--	--	--	--	--	--	--	0.2
*Miscellaneous ²	--	--	--	--	--	--	--	--
<u>Personal Income Tax</u>								
*Three Year Phase-In of 5.5% (Jan. 1, 1976; Jan. 1, 1978 1.5%; Jan. 1, 1979 2.5%) (Removed May 1982).....	--	--	--	--	--	--	2.6	3.8
<u>Corporate Income Tax</u>								
*9% Rate for Small Business (January 1977).....	--	--	--	--	--	--	0.2	3.4
*9% to 0% (January 1984).....	--	--	--	--	--	--	--	--
*Tax Credit for Small Business (Jan. 1986).....	--	--	--	--	--	--	--	--
<u>Gasoline Tax</u>								
*Propane - 23% to 13% (May 1982).....	--	--	--	--	--	--	--	--
*Refund to Truckers (May 1986).....	--	--	--	--	--	--	--	--
*Shrinkage Allowance (May 1986).....	--	--	--	--	--	--	--	--
<u>Miscellaneous²</u>								
*Succession Duties and Gift Tax (December 31, 1973).....	--	--	1.9	1.9	1.9	1.9	1.9	1.9
TOTAL: TAX DECREASES	1.0	8.1	11.4	15.1	39.7	49.5	62.1	78.3
CUMULATIVE TOTAL	1.0	9.1	20.5	35.6	75.3	124.8	186.8	265.1

¹ Mobile homes (with furnishings) moved to 6% and unfurnished moved to 4% in April of 1978.

² Includes - Sales tax exemption on microfilm (March 15, 1974);

- Increase in basic sales tax exemption (11% to 25% to 35%);
- Increase in exemption for candies and confections (25% to 35%);
- Exemption on equipment designed for paraplegics;
- Greenhouse plastic;
- Medicaments for animals (over-the-counter);
- Exemption of Drycleaning chemicals (May 1985);
- Rebate for equipment used by disabled (May 1985).

³ Includes extending widows exemption to all persons, vacant home credit. The widows exemption was changed to low income residential property owners credit May 1986.

TABLE 11.9

INTERPROVINCIAL COMPARISON OF SELECTED TAXES
JUNE 1, 1987 UPDATE

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	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1) <u>PERSONAL INCOME</u> (Percent of Basic federal Tax) ^a	60	55.0	56.5	58	n/a	50	54	50	46.5	51
Flat Tax on Net Income.....	--	--	--	--	--	--	*	1	--	--
Flat Tax on Taxable Income..	--	--	--	--	--	--	--	--	1	--
Surtaxes on Provincial Income Tax (Various Limits, See See Footnotes).....	--	--	--	--	--	3	20*	12	8	--
2) <u>CORPORATION INCOME</u> (Percent of Taxable Income) ^b										
General Rate/M & P**.....	16	15	15	15	5.9	15.5/14.5	17	17	15/9	15
Small Business Rate/M & P...	10	10	10	9	3.22	10	10	10/0	5/0	11
3) <u>CORPORATION CAPITAL</u> (Percent of Taxable Paid-Up Capital) ^c										
Non-Financial Corporations..	--	--	--	--	0.48	0.3	0.3*	0.5	--	--
Trust Companies.....	2.0	--	1.5	2.0	0.97	0.6	0.9*	1.2	--	2.0
Banks.....	2.0	--	1.5	2.0	0.97	0.8	3.0	3.0	--	2.0
4) <u>RETAIL SALES GENERAL RATE</u> (%)	12	10	10	11	9	7	7	5	--	6
5) <u>GASOLINE</u> ^e										
Percent of Retail Price....	22	20	20	20	n/a	n/a	n/a	--	n/a	20
Cents Per Litre.....	9.8	9.0	8.9	7.7	13.65	8.3	8.9	--	5	8.39
6) <u>DIESEL FUEL</u> ^e										
Percent of Retail Price....	26	23	21	23	n/a	n/a	n/a	--	n/a	n/a
Cents Per Litre.....	12.1	10.8	9.3	8.2	12.45	9.9	9.3	--	5	6.83
7) <u>TOBACCO</u> ^f										
Percent of Retail Price....	n/a	n/a	n/a	50	n/a	n/a	n/a	n/a	n/a	n/a
Cents Per Cigarette.....	4.78	3.50	4.50	4.12	4.52	2.83	4.60	4.00	4.00	3.88
8) <u>RESIDENTIAL PROPERTY TAX</u> (s) ^h (1986 Royal LePage Survey)	899	1,200	1,378	721	1,579	1,398	1,884	1,596	1,169	1,273
9) <u>INSURANCE PREMIUMS</u> (%) ^d	4	2	3	3	3	3	3	3	3	3
10) <u>HOSPITAL AND HEALTH INSURANCE PREMIUMS</u> (Maximum Monthly Rates)										
Single.....	--	--	--	--	--	29.75	--	--	14*	20
Family of 2.....	--	--	--	--	--	59.50	--	--	28*	37
Family of 3.....	--	--	--	--	--	59.50	--	--	28*	47
11) <u>PAYROLL TAXES</u> (Percent) ^g Employers with Payrolls										
Under \$100,000.....	--	--	--	--	3.22	--	--	--	--	--
\$100,000 to \$150,000.....	--	--	--	--	3.22	--	gradu.	--	--	--
Over \$150,000.....	--	--	--	--	3.22	--	2.25	--	--	--

*Denotes a Budget change effective later in the year. These changes will be incorporated into the table as they become effective.

**Tax rate on manufacturing and processing income.

FOOTNOTES TO INTERPROVINCIAL TAX COMPARISON TABLE

(a) PERSONAL INCOME TAX

Saskatchewan has a 12% surtax on provincial tax in excess of \$4,000, plus a 1% flat rate surtax on net income. Saskatchewan also has a tax reduction of \$260 for low income individuals. Effective July 1, 1987 Manitoba will impose a 2% flat tax on net income, combined with a tax credit of 5% of personal exemptions for low income individuals. Manitoba currently has a 20% surtax on provincial tax in excess of \$2,600. Effective January 1, 1988 this will be replaced by a 2% surtax on net income above \$30,000. Ontario has a 3% surtax on Ontario income tax in excess of \$5,000. Alberta, Saskatchewan, Manitoba and Ontario also reduce provincial tax payable at low income levels through application of tax reduction or tax credit measures. In Alberta, effective for the 1987 tax year a flat tax of 1% will apply to taxable income and a surtax of 8% of Alberta tax payable will apply to incomes in excess of \$36,000. Quebec levies its own personal income tax and, therefore, the tax is not presented as a percentage of federal tax.

(b) CORPORATE INCOME TAX

In British Columbia, a refundable small business employment tax credit of \$300 per employee is payable to corporations for their first 2 tax years after March 31, 1985. The general corporate tax rate will be reduced to 14%, effective January 1, 1988. The Ontario manufacturing and processing rate also applies to taxable income from mining, farming, logging and fishing operations. Effective May 20, 1987, profits from new mines will be exempt for three years in Ontario. Newly incorporated Ontario small businesses are exempt from tax in their first three years of operation as are Quebec small businesses incorporated after May 1, 1986. In Nova Scotia small businesses incorporated after April 18, 1986 receive a tax holiday for their first 2 years of operation. In New Brunswick an effective rate of approximately 5% applies to firms with less than \$110,000 of income for the 1986-1988 period, 9% applies to first \$200,000 income and 15% on income above \$200,000. In Quebec a rate of 13.24% applies to financial institutions or non-active income. The Quebec rates include their surtaxes introduced in their 1986 Budget. In Newfoundland, new small businesses with \$200,000 eligible income can apply between April 3, 1987 and April 3, 1989 for a two year tax holiday.

(c) CORPORATE CAPITAL TAX

In British Columbia, effective April 1, 1987 the corporation capital tax will apply to all banks and trust companies operating in British Columbia with paid-up capital in excess of \$500 million. A new deduction will also be introduced to permit provincial corporate income tax to be offset against corporate capital tax.

(d) INSURANCE PREMIUMS TAX

Tax is payable by insurer. In British Columbia, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick and Nova Scotia, life, sickness and accident insurance premiums are taxed at 2% and all other premiums are taxed at 3%. In Newfoundland (except marine) and Quebec (excluding individual life, sickness and personal injury), insurance premiums are also subject to sales tax. Effective April 30, 1987 Quebec reduced the retail sales tax on auto insurance premiums from 9% to 5%. Most provinces levy an additional tax of 1% or less on fire insurance premiums to fund the Office of the Provincial Fire Commissioner.

(e) GASOLINE AND MOTIVE FUEL TAX

Tax rates shown are for regular leaded gasoline and diesel fuel. In British Columbia, the tax on diesel fuel is equal to the gasoline tax plus 0.44 cents per litre. In Quebec, the gasoline and diesel tax rate in restricted outlying regions is reduced by 4.8¢/litre. Five provinces (British Columbia, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland) adjust tax rates periodically, depending on price fluctuations. Manitoba and Ontario set tax rates annually in their budgets. Manitoba's basic tax rate on gasoline is 8.1¢ per litre with a surcharge of 0.8¢ per litre added to leaded gasoline for a total of 8.9¢ per litre.

(f) TOBACCO TAX

In British Columbia, the tax on cigarettes is indexed to reflect changes in the retail price. New Brunswick uses an ad valorem of 50 percent set rate applied to a determined retail price (exclusive of tax). Other provinces tax cigarettes by amounts which cannot be adjusted without legislative amendment (Nova Scotia has a 50% ad valorem rate on tobacco products other than cigarettes). Tobacco is also subject to retail sales tax in Newfoundland (37¢/pack) and Ontario (18¢/pack). Effective May 4, 1987 a retail sales tax of 7% will apply to tobacco products in Manitoba, and the excise tax will be increased to 4.6¢ per cigarette.

(g) PAYROLL TAX

Only Quebec and Manitoba levy payroll taxes and in both cases they are employer paid.

(h) PROPERTY TAX

Property taxes shown are unweighted averages of all urban centers reported in Royal LePage survey (October 1986). Taxes shown are for urban three bedroom bungalows (1,200 sq. ft.) with one car garages.

Chapter III

NEW BRUNSWICK TAX REFORM OPTIONS IN THE CONTEXT OF
FEDERAL REFORM PROPOSALS1. Tax Reform in Canada

The Department of Finance of the federal government has proposed to introduce tax reform in Canada in the near future. The Minister of Finance announced the preparation of a public document on federal tax reform in the February 1986 Budget, with a release date, after repeated delays, of June 18, 1987. The federal reform initiative has substantial significance for the provinces. Likewise, the uncertainty of the specific form of the federal package imposes uncertainty on the provinces.

Preliminary indication of the direction of federal tax reform is provided in a document released by the Minister in October 1986 entitled Guidelines for Tax Reform. Above all, that document reveals a commitment to comprehensive as opposed to incremental or piecemeal tax reform. The federal government appears to be prepared to examine and reform the complete tax system and this must inevitably involve the provinces. The stated objectives of current federal tax reform are to establish a system that is fairer and simpler while at the same time being consistent with an environment that encourages efficient economic activity. Such a system, according to the Guidelines, would redress present problems of imbalance in the tax mix, instability in fiscal revenue flows, distortions to international competitiveness, and inhibitors of economic growth, while meeting distinctive national priorities regarding national, social and economic needs, including regard for structural differences among the regions.

Some aspects of Canadian federal tax reform are predictable, especially in light of the recent reforms in the United States, statements by the Minister, and the focus of various pieces of analytic work within the Department of Finance as well as recommendations of the Economic Council of Canada in its

Roadmap for Tax Reform. For instance, it seems that the federal tax mix will be adjusted in favour of increased reliance on indirect taxes with relatively less reliance on direct taxation. As far as direct taxation itself is concerned, the balance will shift away from personal income tax toward corporate taxation.

With pressures to move in line with the recent U.S. reforms, and consistent with the general direction in fiscal reform in many other countries, federal tax reform in Canada will likely result in broader, more comprehensive direct tax bases and lower rates. This will provide fewer exemptions and, it will reduce reliance on the tax system to achieve specific allocative and distributive objectives. However, compared to the U.S., Canada has few significant fiscal holes to plug. Therefore there is less scope to broaden the federal direct tax bases and correspondingly less scope to substantially lower rates without major loss of revenue.

Lower federal personal income tax achieved by lower rates and a broader base would have several implications for New Brunswick. It will mean lower New Brunswick personal income tax revenue from the present 58 percent provincial tax levied on federal basic tax. The federal changes will also make the personal income tax less progressive as well. New Brunswick should raise its 58 percent rate to offset a revenue loss. Alternatively, a new surtax could be imposed, which could restore some or all of the progressivity removed by federal reform.

Concerning corporate income tax, a broader base and lower rates could hurt investment incentives in New Brunswick as well as the natural resource industries. New Brunswick should consider measures to counteract such effects of federal changes.

The anticipated increased reliance on indirect taxation has three principle motivations in Canadian tax reform. First, since ostensibly "revenue-neutral" tax reforms necessarily involve trade-offs in revenue sources, and with every indication that direct tax rates and revenues will fall, a broadly based

indirect tax provides an efficient alternative revenue source. Second, the heavily criticized, highly distortionary and inefficient federal manufacturers' sales tax seems destined finally to be dismantled, to be replaced by a more properly designed tax of the value-added variety. Third, modern tax reform is being driven to a large extent by the policy position that it is preferable to tax consumption as opposed to income - or at least not to tax savings and investment. Such a provision can be conveniently incorporated in a broadly-based indirect tax structure.

The main challenge which New Brunswick faces as a result of any major federal tax reform arises from the change in tax mix (the balance between direct and indirect taxes) which may result. Because provincial income tax revenues are calculated as a fraction of federal taxes paid by provincial residents, a cut in personal tax rates at the federal level will reduce provincial revenues. On the other hand, increases in federal indirect taxes (such as nonrevenue-neutral change involving a replacement of the manufacturers' sales tax by a VAT or BTT raising more revenue) will not generate corresponding increases in provincial revenues. In fact such a measure may have the opposite effect. Currently provincial retail sales (RST) tax apply to the retail value which includes the MST. The anticipated change to a broader federal sales tax at a substantially lower rate could very well result in lower RST revenue for the provinces. Overall, changes in the tax mix at the federal level will tilt more towards indirect taxes thus reducing provincial revenues and forcing provinces to make compensating adjustments to their own tax system.

2. The Business Transfer Tax Versus The Manufacturers' Sales Tax

The Minister of Finance has indicated his view that the existing federal sales tax should be replaced by an alternative and more broadly based sales tax system such as a value added tax (VAT) or a business transfer tax (BTT).

Official statements on this issue thus far suggest the BTT is the preferred alternative. Sales tax reform is cited under most of the key objectives of policy reform -fairness, balance across revenue sources, stability of revenues, economic growth incentives, international competitiveness, simplicity, administrative efficiency, and tax compliance. The provinces, including New Brunswick, should support federal reform of indirect taxation insofar as it offers to eliminate the Manufacturers' Sales Tax (MST). No tax currently in force has been so soundly criticized for such substantial and varied reasons as the MST. For example, the federal sales tax arbitrarily excludes personal services while it just as arbitrarily includes some producers' goods - such as computers, office machinery, passenger cars and fuels. As indicated in Volume I of New Brunswick Tax Reform Options, approximately 50 percent of MST collections originate from business purchases of capital goods and intermediate products, with implications for both the scale and factor mix of industrial production. The Manufacturers' Sales Tax introduces an effective rate of tax on production that is randomly determined by capital-intensity, distribution patterns, the degree of vertical integration, and even advertising to the extent such costs are incurred prior to sale by manufacturers. The MST distorts trade by the difficulty of determining the correct border tax adjustment on Canadian exports of manufactured goods. The problem goes beyond manufactured exports to any export produced or processed by capital or other inputs that have borne the MST. Furthermore, since no single composite rate exists for a given product, no definable rate of compensatory import tax can be assigned to imports so as to impart exactly the same tax burden as that borne by comparable domestic products.

A major aspect of the uncertainty of federal tax reforms faced by the provinces, and hence the need for qualification of the foregoing recommendation to New Brunswick, is the question of the specific form that the Business

Transfer Tax takes, assuming that a BTT indeed is introduced. For example, it remains to be seen how comprehensive the BTT will be, what its rate will be, and how it will apply to various items of consumption. Especially perplexing problems arise with housing services. For example, a BTT applied to rental housing but not to the implicit rent of owner-occupied housing would intensify an existing tax distortion. Special problems also arise with financial services, hospital and educational services, and consumption by nonprofit institutions and government. The Economic Council of Canada notes that some of these may be exempted while others could be zero-rated. It is important to note the difference in these approaches. Exempting some institutions deprives them of a mechanism by which to obtain relief from taxes paid on their inputs. On the other hand, zero-rating brings the supplier into the circle of licensed vendors and confers on him the right to deduct taxes on inputs.¹

3. The RST, The VAT, and the BTT

A value-added tax (VAT), the business transfer tax (basically a subtraction method VAT) and a broadly based retail sales tax (RST) all have essentially the same total tax base, namely total final domestic consumption of all marketed goods and services.² The advantages of a comprehensive VAT or BTT over the existing federal sales tax are that: a) no tax is levied on purchases of capital goods, intermediate goods, or other business inputs; b) it facilitates accurate border tax adjustments on traded goods; c) it is collected throughout the production/distribution process, thus avoiding collecting all tax at a single tax point; d) enormous revenue potential in a relatively non-distortionary framework.

However, the method of application of the BTT to business firms differs substantially from both the single-stage RST and the traditional multi-stage VAT. The BTT has been described as a "subtraction-method" VAT, in contrast to

the "invoice-method" VAT adopted in many countries, especially in Europe. Under the subtraction method, an individual firm simply sums gross sales to domestic customers and subtracts all purchases of intermediate and capital inputs to arrive at its tax base. Its tax liability is the BTT rate times the base.

One of the drawbacks or advantages (depending on the perspective adopted) of the BTT is its limited scope to exempt particular goods or services from the base. The BTT applies to all transactions along the production and distribution chain by applying the rate to the value of sales minus purchases. Exempting a good would create a distortion in this process unless the nontaxed purchases were kept track of which would increase administrative complexity. For the same reason, attempting to apply multiple tax rates on different products can impose insuperable problems. Any such attempt would substantially increase administrative, compliance, and enforcement costs as well as weaken the basic fiscal and economic integrity of the broad-base concept.

Basically, once the BTT system involves exemptions it becomes necessary to distinguish exempt from non-exempt purchases much as with the invoice method. Multiple rates also make consistent tax treatment along the production/distribution path practically impossible. Furthermore, depending on how the provinces -individually or collectively - choose to adjust or not adjust, coordination of the BTT with the provincial RSTs poses problems made all the more difficult with multiple rates. Such problems, however, must be anticipated because the experience in other countries that have opted for a VAT shows that exemptions and rate differentiation are difficult to avoid in practice.

At the federal level, recommendations such as those by the Economic Council call for a business transfer tax at a uniform level with as few exemptions of consumption goods and services as possible.

4. Cautious Response to the Federal Tax Reform Initiative

At the time of our writing the federal discussion paper on tax reform is not out yet, and it is not expected until June 18, 1987. Even then, it is expected to be a discussion paper, the purpose of which is to elicit response and criticism leading, presumably, to reformulation in light of the relevant feedback. At the present time, however, discussion of New Brunswick's position and its response to the eventual federal reforms is like dancing with shadows. A structure is required within which to assess the provincial implications of anticipated major adjustments of the federal tax mix, including the expanded role of a broad-based consumption tax (the BTT) designed to serve as a relatively neutral revenue source to supplant the revenue foregone by the much-maligned Manufacturers' Sales Tax. It is also reasonable to expect somewhat broadened personal and corporate income tax bases along with reductions in average rates and reductions in the progressivity of marginal rates. Given the federal-provincial tax arrangements, and especially in view of the substantial role sales taxes have long played in New Brunswick policy, the question of appropriate response to the BTT is the most important issue at hand.

If the federal government decides to introduce a business transfer tax while one or more of the provinces continue to use retail sales taxes, all retail outlets and many non-retail businesses in such provinces would be confronted with two different types of sales taxes. This situation would obviously be a nuisance and a source of unnecessary administrative, compliance, and enforcement costs. However, the structure of the retail sales tax in New Brunswick incorporates a history of decisions to achieve certain provincial, social, economic and political objectives. The present effects of past policies cannot all be dismissed out of hand as inefficient. New Brunswick, as with most Canadian provinces, does not have a great deal of tax autonomy to begin with and thus the province must carefully assess new federal taxes that reduce provincial

autonomy further. The challenge to provincial policy makers in view of the fiscal uncertainty created by the federal government is to prepare a means to analyze the provincial consequences of various federal-provincial tax scenarios.

The existence of provincial retail sales taxes obviously complicates the question of appropriate alternative replacement of the federal sales tax, that is to adopt the BTT or to shift the MST further down the production/distribution line. There are two principle considerations.³ First, regardless of which tax is chosen by the federal government, it might be desirable to operate the federal and provincial indirect taxes jointly so as to minimize public administrative costs and private compliance costs. Different federal and provincial retail sales tax bases operating simultaneously would prove to be unwieldy for business. Second, provincial retail sales taxes, as will be discussed in Chapter IX, apply to some capital and intermediate goods as well as some service inputs. This tax cascading problem would become even more of an issue in discussing the possibility of federal-provincial retail sales tax harmonization agreement. However, the practical difficulty within the whole of Canada in regard to such an agreement, is that each province will wish to retain its prerogative to exempt particular categories of goods and services on local economic, social or political grounds. Thus a common and highly comprehensive retail tax base among the provinces which in turn is harmonized with a federal retail sales tax is a slim prospect. An operational system along such lines is viable only if the provinces are willing to adapt their structures to the federal one and not the other way around.

Likewise, despite the substantial potential gains in allocative efficiency from a federal BTT or VAT (versus the MST), the implementation of a coordinated federal-provincial system is beset with serious problems. As Kesselman indicates:

Like with the retail sales tax, the provinces would wish to retain some measure of discretion over exempting specific categories of consumer goods and services. Merging the highly visible provincial retail sales taxes into a federal-provincial VAT or BTT would cause a major reduction in the visibility of the total tax system. The provinces would want to set their own rates of tax if they piggybacked onto a federal BTT or VAT. The credits used under the invoice-method VAT would permit such interprovincial variation in tax rates, although at some cost in administrative resources. But provincial piggybacks onto a federal BTT would pose severe operational problems - similar to those created by multiple BTT rates -resulting from interprovincial sales of intermediate products. Hence there remains little hope for achieving a fully harmonized federal-provincial indirect tax system, with its concomitant administrative and compliance savings.⁴

Perhaps the most reasonable federal proposal would be a BTT with a set of incentives to the provinces to modify their retail sales tax systems so as to purge the most seriously distortive items and letting each province decide on its tolerable degree of overlap with the federal system. For example, the federal government could compensate a province that removes the retail sales tax on business inputs or that lowers the general provincial rate of sales tax.

A major difference between the BTT and a credit-invoice VAT is the feasibility of operating these taxes as a joint federal-provincial system in which the provinces fully participate by removing their own provincial retail sales taxes and using the federal tax base to raise provincial revenues. It is widely agreed that a joint federal-provincial BTT may prove unfeasible, while a joint federal provincial credit-invoice VAT, while complex, is none the less workable. The complications in such arrangements stem from the fact that provinces currently have different retail sales tax rates. A joint federal-provincial tax would thus have a single uniform national federal rate, but the combined federal-provincial rate would vary across provinces. Major problems would accompany the border tax adjustments which a credit invoice VAT could possibly accommodate while the BTT probably could not.

On the other hand, one of the most common theoretical arguments in favour of a BTT as opposed to a VAT or an RST is that by its very structure this tax effectively limits the possibility of applying multiple rates and or exemptions.

The advantage of the subtraction method BTT over the VAT is that it reduces the heavy paperwork required when implementing an invoice or credit method VAT where firms have to account for all purchases and sales to compute tax liability and credits. Implementing multiple rates and exemptions under a BTT system is virtually impossible. It has been argued that this in effect guarantees the neutrality and administrative simplicity of the tax. However, this also effectively rules out the BTT as a vehicle for a joint federal-provincial sales tax.

Clearly federal tax reform will have a tremendous impact on the provinces at several levels. For the New Brunswick government, which is in the process of reassessing its tax system, there are many unknown quantities to face. From the point of view of reforming the current retail sales tax the following questions emerge.

- How will the implementation of the federal BTT affect New Brunswick RST revenues?
- How will New Brunswick businesses cope with having to deal with two distinct sales taxes?
- Should the province opt for a tax sharing agreement related to the BTT and eliminate the RST?
- What would be the revenue impact of such a move?
- How would such an agreement be defined?

Indications are that the province would have to adopt the federal base.

This means that the province would no longer be able to exempt specific categories of goods and services from sales taxation. Although this has certain economic advantages in enabling the province to adopt a more comprehensive and more neutral sales tax without having to explicitly take away exemptions granted under the current RST, it also reduces considerably the province's scope for intervention through the tax system. Moreover it has also been argued that the BTT must be applied at a uniform rate. This would mean that tax sharing

provinces would not even be able to set their own rate. It remains to be seen whether or not tax rate differentials are administratively feasible. As already mentioned the issues here are complex. They involve inter-jurisdictional allocation of tax bases and border tax adjustments.

New Brunswick shares borders with three Canadian provinces (if we include the watery frontier between New Brunswick and Prince Edward Island) and a long international boundary with the United States. The openness of the New Brunswick economy, of course, goes beyond contiguous provinces and states in view of trade with and travel to or from more distant places. Problems of applying a broad-based value-added or business transfer tax are due not only to the fact that New Brunswick is within a federal political system with its attendant federal-provincial tax sharing agreements, but also because the economic structure of modern industry spans borders and creates difficulty in assigning revenues and expenses to specific jurisdictions.⁵ The issue is of more concern for some sectors than others with the more important including transportation, banking and finance, insurance, and telecommunication services. The problems they pose relate essentially to the determination of origin or destination of a particular supply. For example, how does one tax a passenger journey originating in New Brunswick but ending in Maine? Or a telephone call between New Brunswick and Alberta? Or fire insurance purchased in Moncton for a summer home in Nova Scotia? In the case of banking and financial transactions there are additional problems for defining the appropriate base for a sales tax and distinguishing consumption from business-use portions of the base.

These problems are by no means unique to provincial-federal or interprovincial tax coordination. Indeed, they currently cause considerable acrimony among nations.⁶ Consequently, for example, no national government has been able to apply a sales or value-added tax to the banking and finance sector. Such business is either exempt by explicit policy or is de facto exempt

because of the ability of such business to avoid tax. It is virtually impossible to distinguish - or to enforce policy on the basis of arbitrary distinctions - between domestic and foreign value-added in interjurisdictional finance. Similarly, it has been necessary for national tax systems to include special provisions for transborder transportation.

These problems of the interjurisdictional allocation of value-added or income are not new and, moreover, at least to the extent that they involve business that spans borders they ought to be easier to resolve in the context of the Canadian federal system than they are in the international arena on which much of the attention is paid.

For New Brunswick, these remarks are to draw attention to a potentially thorny issue in the upcoming analysis of the implications for the province of the federal proposals. It is especially pertinent to note that the smaller -and per force the more open - the jurisdiction, the more significant transjurisdictional sectors become in the tax mosaic.

A BTT will also affect the structure of prices in Canada. Notwithstanding the definition of the BTT base and the rate, the extent to which the price of a particular item or service will go up or down depends on various factors including whether or not the product had previously borne the Manufacturers Sales Tax, the degree of competition in the supply of the product or service and the ease of entry to the industry, the degree of tax cascading, and the elasticity of demand.

In view of the inevitable price changes, which in aggregate must increase the tax-inclusive price of a typical consumer bundle, one may be more circumspect of remarks in The Guidelines for Tax Reform such as:

The government should rebalance its revenue sources to reduce the extent of its reliance on personal income taxes. This will increase the take-home pay of most Canadian workers.

Indeed, while for allocative reasons there is much to commend the shift in the tax mix from less direct to more - and more rational - indirect taxation, there are nevertheless important redistributive consequences to anticipate and, according to welfare priorities, to offset. Although workers will perhaps have more after tax take-home pay, they will pay more tax on the items that they purchase. Those people without substantial employment or capital income - the elderly, the poor, the unemployed, and those in the net dissaving part of the life-cycle will suffer reductions in real consumption power. Such reductions in real consumption power reflect increases in the average tax paid by such persons. A method of compensating for the adverse redistributions might reasonably include an Ontario-type tax credit which is a function of total consumption and the level of net income.

In light of these considerations, and especially in light of the uncertainty of the structure and consequences of the federal tax proposals, New Brunswick is advised to "wait and see and then do some calculations". Gains and losses for the province, winners and losers within the province, and the extent of various wins and losses, can be quantitatively assessed only with more specific information on the federal plans to introduce a business transfer tax, to eliminate the Manufacturers' Sales Tax, to broaden the bases of personal and corporate taxes while lowering marginal rates, to restructure federal-provincial tax interaction, and to modify the federal equalization program.

The major point here is that New Brunswick must be prepared when the time comes to assess as fully as possible the potential impact of federal tax reform on the provincial economy and on the provincial government's finances and to make adjustments accordingly. This may include the possibility of modifying the provincial tax mix, opting for a VAT sharing agreement and negotiating revisions to federal transfer programs. Also, special provisions may be required to

alleviate the possible detrimental affects imposed on particular groups of taxpayers in the transition phase.

References

¹The Economic Council of Canada. The Road Map for Tax Reform, p. 24.

²The following discussion of the mechanics of the BTT and the comparisons with a value-added tax and a comprehensive retail sales tax closely follows Jonathan R. Kesselman, "The BTT, The Tax Mix, and Tax Reform, an address to the Thirty-eighth Tax Conference of the Canadian Tax Foundation, Toronto, November 24, 1986.

³Following Kesselman, op. cit., page 8-10. Consistent views are presented in John F. Due, "The Choice Between a Value-Added Tax and a Retail Sales Tax", in the section addressing "Reform of the Federal Sales Tax", in Report of the Proceedings of the Thirty-Seventh Tax Conference (1985), Canadian Tax Foundation, pp. 16:1-16:10.

⁴Op. cit., page 9.

⁵These views closely follow Satya Poddar, "The Value-Added Tax at the State Level", an unpublished manuscript, Department of Finance, Ottawa, 1986.

⁶For a review of the issues, the economics, and the law, see Richard M. Bird and D.J.S. Brean, "The Interjurisdictional Allocation of Income and the Unitary Tax Debate", Canadian Tax Journal, 34 (6), November-December 1986, pp. 1377-1416.

Chapter IV

GROWTH AND JOB CREATION: THE CURRENT REALITIES OF THE
NEW BRUNSWICK ECONOMY1. Introduction

This chapter explains our judgement that New Brunswick's choice of reforms should, at this point in time, be motivated primarily by the need to stimulate economic growth and create jobs. Several factors in the international economic environment are putting new competitive pressures on New Brunswick. Creative adjustments by businesses and by individuals will be essential. Tax reform should be designed to encourage and support such adjustments, including new investments in machinery and equipment and also further investments in human capital through education, retraining and research.

New Brunswick's unemployment rate in 1966 was 5.3 percent. By 1976, this had risen sharply to 11.0 percent, and in recent years it has climbed as high as 14.9 percent. This high unemployment rate is a factor in New Brunswick's relatively low participation rate of 57.5 percent in 1986. This labour situation contrasts with the experience of Canada as a whole. With the exception of a brief period in the early 1970s, Canada's unemployment rate has been significantly lower than New Brunswick's for decades. Also, the nation's participation rate has substantially exceeded that of New Brunswick. To some degree, the nation's higher participation rate may have reflected a different age structure. Nevertheless, New Brunswick's low participation rate is no doubt influenced by limited job prospects.

New Brunswick's gross domestic product (GDP) per capita has long been stuck at a low level compared with the rest of Canada. In 1965, New Brunswick's GDP per capita was 62.9 percent of the national average; by 1984, this had risen to 64.2 percent.

Eliminating regional disparity is a gradual process. It requires the provincial economy to grow more quickly than the average for all of Canada. Government cannot guarantee such growth, but it can act as a facilitator in the process by creating an appropriate general environment and developing institutional arrangements that give entrepreneurs freedom to act on incentives for growth.

Growth means change, and resource reallocation, and growth through innovation must be supported by the availability of capital and a well educated and trained labour force.

Tax reform is one element in this process of stimulating economic growth. Tax reform is an important element, but other government activities also are significant. Among these, expenditure programs deserve particular emphasis. As discussed at several points in this report, expenditure programs can serve as an alternative to special tax concessions, such as new credits for investment or for education, retraining, and research.

2. Growth and the Changing Economic Environment

In order to achieve higher rates of economic growth, some understanding of developments taking place internationally, and how New Brunswick fits into them, is necessary. It is also necessary to have some understanding of the Provincial impediments to participating in these developments and achieving improved growth and development. The major developments and impediments will be outlined next.

Tariff barriers are being substantially reduced, transportation costs have fallen dramatically, and communication is both easier and cheaper. The net result is a dramatic increase in price competition for domestic producers in both their home and export markets.

The impact on growth in New Brunswick of this movement to freer trade poses

both problems and opportunities. Producers here must be more cognizant of international events and competitiveness if they are to survive, since foreign products now have easier access to their markets. At the same time, it provides producers with the opportunity, if they are competitive, to increase their market share internationally, thereby creating jobs and growth in New Brunswick.

A recent development in the economic environment has been the rise in protectionism in the United States. This provides all the more reason (in addition to the basic one related to improvements in the standard of living) for Canada to obtain freer trade arrangements with the United States.

However, there is likely to be a price for freer trade, and it could be high for places like New Brunswick that need special incentives to generate growth and development. The price may be the elimination of subsidies and other schemes designed to create regional growth. The United States is unlikely to give up its trade protection laws without some guarantee they are not needed to protect themselves from subsidized production of goods made in Canada. Thus, free access to the U.S. market could result in changes to Canadian regional development policies that would be detrimental to New Brunswick producers and economic growth.

Other initiatives related to regional development and tax expenditure programs could provide some help to New Brunswick. The Federal government is proposing to implement an Atlantic Enterprise Development Board which would provide financial capital on extended terms to new businesses and also engage in other programs such as interest buy-downs. The Minister of Finance for the Province is also requesting a \$2 billion dollar loan for the Atlantic Provinces from the Federal government, on favorable terms, to help overcome the reduced commitment of the Federal government to transfer payment programs. These initiatives should help to overcome some of the current deficiencies in the

Province's capital markets for new and small businesses.

There is yet another major change in the world economic environment that is gathering on the horizon, in addition to freer trade with the United States. It is the major technological revolution in relation to the use of knowledge. It is already underway and has major implications for a relatively undeveloped economy such as exists in New Brunswick. There will be rapid growth in industries both producing and relying on information-based technologies. Intellectual capital is a key input into these industries. Many of them are in the services sector, such as medical care, producers' services and telecommunications. Others are in the manufacturing sector, such as computers, transportation and equipment. Firms in these industries will be heavily reliant on the existence of nearby universities with faculty working at the frontier of their disciplines. These disciplines include not only the traditional ones in the "hard" sciences such as engineering, computer science and physics, but also the "soft" sciences so important to management decision-making and labour-management relations in such fields as economics, administrative studies, sociology, psychology, philosophy and history. The "hard" sciences will continue to supply technical knowledge as they do now on how and what to produce. But the "soft" sciences will be increasingly needed to deal with how to administer complex technical and human systems in an era of rapid technical change.

The world is now entering a new era of technologies based on knowledge. Firms will have to cope with the use of high levels of intellectual capital to produce products and manage their production systems. Production systems will be organized differently with more emphasis on the use of management sciences to build cooperative and harmonious relationships between labour and management in a highly mechanized and computerized factory system producing specialized

products for the world market in large volumes. It is important, if longer-term growth is to be achieved, that there be an increase in the number and type of such well-managed producers in the Province. There also must be a much closer relationship developed between the business sector and the universities in order to foster the transmission of new ideas and technologies to these firms. Otherwise, it will be difficult for them to survive in a world in which information technologies will be important.

3. New Tax Credits for Education, Retraining, and Research

There are several reasons why a government today should use tax money raised from everyone to assist the advancement of research and the development of individual knowledge and skills. Without government involvement, the private sector would spend less on these activities than would be optimal for society as a whole. Economists point to what they call "market failures" that justify government policies and public funding. Research and education have important indirect or "third-party" effects because of which the private market, left to itself, will fail. Both research and education do benefit people and firms other than the direct participants. Only government can include these indirect benefits in calculating the optimal amount to invest in research and education.

Increasing the society's rate of economic growth. Most significantly, perhaps, research and education policies are a means of raising the growth rate of the economy as a whole. These relationships and economists' analyses of them were surveyed by Griliches (1979). Five years later, Griliches (1984) again examined the most important themes of research in this field, including the "belief that invention and technical change are the major driving forces of economic growth." Recently, many countries have experienced what Denny and Fuss (1982) have referred to as "The Great Productivity Slowdown." In their words, "productivity growth has been very slow in the early 1980s, and there is growing

concern that the government must undertake some action." A closely related broad third-party effect that impinges on society as a whole is that government revenues and expenditures are affected by the rate of economic expansion. In a time of large deficits, the argument for special research and education policies to provide jobs and growth may receive strong support for this particular fiscal reason.

Public funding as a mechanism for sharing risks. Nearly everyone in a changing society must make judgements in the face of uninsurable risks. Personal decisions concerning education, career, employer and private investments all involve such risks. Since modern life has automatically subjected everyone to important risk-bearing, an argument is sometimes made for a new kind of government intervention that pools specific risks and rewards, so that individuals are less exposed to economic misfortune. That is, government may be able to ensure against risks in a situation where citizens want such insurance and where no institution other than government can provide it. Present-day economic activities now involve such new and severe risks for all citizens that the the optimal social contract may entail a sharing of many of these risks, as well as a sharing of the concomitant rewards and losses. Arguments for such risk-sharing may recommend provision of public funds for many specific purposes: the personal acquisition of knowledge and skills; employment relocation and retraining; or corporate investments in research and development.

Of particular importance is the view which sees the development of human capital as the result of individual entrepreneurial decisions and which sees risk-sharing as an appropriate insurance purpose of government policies. This view has received special attention. Various authors suggest that a "well-known failure in the market for human capital stems from the inability of workers to diversify their abilities across alternative skills or professions. As a result, workers are said to be too risk averse from society's perspective.

Numerous schemes have been proposed to offset this risk aversion, including the financing of job retaining and other subsidies to promote human capital formation" (Harris, Lewis and Purvis, 1984).

Some observers have applied a similar argument to the Canadian government programs that provide public funds for private corporate research and development (R&D).

The application of the government risk-sharing argument to corporations seems to involve the concept of an acceptable size of downside risk based on the size of the decision-making entity. This type of market failure, based on the inability of the private market to create a sufficiently large corporation to conduct the necessary number of high-risk R&D projects, may vary in significance over time and among countries.

The social rate of return may exceed the private rate of return. Quite apart from the risk-bearing argument for government R&D assistance are possible shortfalls of the private rate of return realized by innovation from the social rate of return it generates. Such shortfalls may arise, for example, from the ease with which knowledge is diffused beyond the firm that is undertaking an innovation and the difficulty that the firm in question has in capturing any payments for the returns, such that knowledge generates for others. The Economic Council of Canada (1983) has supported this argument, and has provided the following illustration.

Estimates of the social and private rates of return for 17 product and process innovations introduced by U.S. firms of different sizes in several manufacturing industries from the early 1950s to the early 1970s, show that the average social rate for these innovations was 56 percent. The private rates were much lower, the average being 25 percent before taxes.

Government intervention to assist R&D is often justified on the basis of such calculations. Over the past few decades, some economists have devoted considerable attention to determining which benefits and costs, outside the

individual or firm, should be included in ascertaining the true social effect of private decisions by these individuals or firms. Furthermore, they have developed an extensive literature on the technical calculations one may use in this type of analysis. Consequently, one cannot accept the precision of such calculations as those of the Economic Council of Canada. It is also important to note the difficulties of calculating third-party effects. In fact, theoretical disagreements can arise about whether particular third-party effects should even be included in a government's calculations.

Certain activities have third-party effects that warrant special mention. Sometimes, once an innovation has been made by one individual or firm, the use of that innovation by others involves no additional cost. Difficulties of excluding others from its use may mean that benefits from the innovation accrue to society in general. Many authors have emphasized this "public good" nature of knowledge and of the R&D that can produce knowledge.

In our modern age, knowledge and skills are regarded by many as new types of social overhead capital, essential for society's progress and yet not adequately developed if they are left entirely to private concerns. Consequently, many see the government's participation as decisive. Knowledge and skills form the framework of today's entrepreneurial activities. Reich (1983) has termed our age "the era of human capital." He emphasizes the need for government adjustment assistance to enable those workers displaced by economic change to develop new skills for new jobs. The above discussion of public risk-sharing suggests that individual investment in one's education and skills entails a large risk of obsolescence and this alone could justify public funding as the only means for insuring the otherwise uninsurable risks involved. Third-party effects of educational and research facilities provide a strong additional argument for public funding.

Public research facilities deserve special mention as a modern form of

social overhead capital necessary for today's entrepreneurship. A precursor of this was the creation of agricultural research institutes and the development of linkages between university agricultural science departments and the implementation of new farming techniques, together with the use of new seeds and fertilizers. This agricultural revolution, with its pervasive entrepreneurial innovation, depended very much on public research facilities. Individual farmers and the corporations supplying those farmers were able to experiment with new production methods based on the research conducted in the publicly funded institutions. Left to themselves, farmers and corporations could not have afforded this level of institutional development, largely because they could not capture all the benefits of the research because their organizational problems would have been immense. Schultz (1981) has emphasized the importance of externalities in this type of research: "under competition, the reductions in real costs of producing agricultural products realized as a consequence of agricultural research are transferred in large measure to consumers." Such externalities occur through price reductions and cause the social rate of return in research investment to exceed the private rate of return.

The social and political rationale for retraining. Any one particular innovation may hurt specific employees by reducing their relative wages or by eliminating their jobs. At best, they may have to move to another corporation; at worst, they may have to retire early, spend a long time searching for work, or become involved in retraining; they may even have to sell their home and move to a different city, paying relocation costs and possibly losing equity in their home as well as their company pension rights. If their community is small or offers few other employment opportunities, or if it is particularly hard hit by job losses, then the suffering may be severe and the unemployed may form a noticeable and politically powerful group. Hence, a society experiencing rapid and substantial technological change will inevitably contain workers who are

hurt by the loss of their jobs and who may consequently seek government assistance, to help them with relocation, retraining, or early retirement.

In a democracy, research and education policy depend ultimately upon the wishes of the electorate. Favourable public support for research and education will depend upon the degree to which the average citizen can be convinced that investment of his or her tax dollars will yield substantial social returns. Favourable public support will depend upon the average citizen seeing that his or her own future well-being can be enhanced. From this perspective of the average citizen, research and education policy can best be understood as a coherent and unified government thrust to advance our economic productivity in the new technological era and to improve the abilities of individuals to obtain rewarding jobs as the economic environment changes.

4. Growth and Changing Patterns of International Trade

There are some changes taking place in the world's economic environment and trade patterns that are more specific to producers in the Province. One of them relates to the changes taking place in the types of products traded internationally. The volume of world exports of agricultural products and minerals has gone up about four times since World War II, which is about the rate of growth in the world's real GDP. However, the volume of trade in manufactured goods has gone up about 15 times. Improved economic growth will be easier to achieve in the production of manufactured goods than in agricultural products and primary materials.

However, the comparative advantages of both Canadian and New Brunswick producers are such that their international competitiveness is in the slow-growing and primary sectors. And, while the natural resources sector is a major area of comparative advantage, it is under increasing competitive pressure.

These factors will reduce the ability of these sectors to be engines of growth in the future compared to their past contribution. In particular, forestry and mining have been subject to slow growth in markets. This is partly due to the halving in rates of growth in world markets over the past decade. It is also partly due to the substitution of man-made for natural resource products. And it is also partly due to highly subsidized new entrants into resource production in the developing countries, who are using their primary sectors to achieve export-led development. The net result is excess capacity, increased competition and low prices which affects the ability of New Brunswick's producers of primary products to be profitable, grow and create jobs.

In the case of the Province's manufacturing sector, many of the firms are in industries that further process the output of the primary sector. One difficulty this poses is that because the primary sector is approaching full capacity utilization (e.g. forest products and ground and shell fish), this could act as a constraint on growth in some manufacturing industries. In addition, some of the manufacturers are in slow-growth, competitive industries such as shipbuilding and petroleum refining that have severe excess capacity problems on a world-wide basis.

5. Cost and Other Factors Influencing Growth

The Province's comparative disadvantage in manufactured products is related to high unit labour costs, reflecting productivity, wage and management skill differences with those of major foreign competitors. For instance, unit labour costs for manufacturers went up much faster in Canada and the Province over the past decade than they did in the countries of our major competitors, Japan and the United States. This was partly due to higher rates of cost and wage inflation. It was also partly due to a slower rate of productivity improvement,

reflecting such things as: slower adoption of improved technologies; poorer labour-management relations; greater resistance by labour to technical changes on the shop floor; and slower adoption of state-of-the-art management practices.

Canada has always been a high cost producer of manufactured goods compared to the United States. The small market size they limited themselves to serving led to the development of small plants with considerable diversity in products manufactured. The result was low productivity and high unit labour costs by U.S. standards.

Traditionally, Canada had a cost advantage compared to such countries as Japan, West Germany and Sweden, but this is no longer the case. The productivity improvement has been more rapid in the rest of the world than in Canada. These cost-influencing factors have limited the opportunity for the Province and Canada as a whole to participate fully in the fast-growing area of world trade in manufactured products.

Smaller firms in the manufacturing sector could provide the opportunity for increased growth if they are fostered through appropriate tax policy. This subject will be the focus of Chapter VIII.

6. Conditions for Achieving Increased Growth

It has to be recognized that, in general, the available pool of educated and skilled workers in New Brunswick needed to support a viable manufacturing sector is relatively smaller than elsewhere and lowers the productivity of firms in the Province. This has been noted by several studies (including those of the Economic Council of Canada). The issue of how to upgrade the training and education of the work force must be addressed in any tax reform proposal designed to increase growth and development.

In addition, producers in the Province need access to institutions of post-secondary education that have first-class expertise in the social, managerial

and administrative sciences as well as the physical sciences and that are prepared to cooperate with producers through various arrangements that would facilitate the transfer of this knowledge to them.

It has been noted that over the past decade there has been a slowing in the rate of growth in the world economy. There has also been a fall-off in productivity improvement along with rising costs of production in Canada. These developments were taking place at the same time there was excess capacity, increased competition and pressure on prices. The combination of these factors has resulted over the past decade in a serious deterioration of the rate of return on assets invested in manufacturing facilities in Canada. In addition, these low reported returns are overstated because they do not allow for the impact of inflation. The era of high inflation in Canada into the early 1980s resulted in depreciation allowances and inventories based on historical costs being understated.

The understatement of these important costs resulted in profits and returns on investment being overstated by about 50 percent in the mid-1980s. Further, corporate profits taxes have been paid on the overstated profits, reducing cash flows even more and thereby reducing the ability of firms to replace their assets and improve productivity with new technologies involving capital-intensive investments.

Attracting large firms would help small firms to grow. For instance, research facilities of large suppliers of materials could spin-off their results to smaller manufacturers either on a contract basis or by embodying their knowledge in the materials that the small firms purchase from the large primary producers. This is similar to the Japanese model, except there, the large firms are final producers and the small firms are suppliers that benefit from the R&D of their major customers. The Province also has year-round, ice-free ports that provide low transportation costs to U.S. markets, which is an advantage for

firms building new, efficient plants to serve the U.S. market, provided that other costs of production are also competitive.

7. Summary

Tax reform should emphasize growth in tax bases through special treatment of investment — investment in physical plant and equipment, investment in human capital through education and retraining, and investment in research to create improvements in production technologies. The business sector can be an engine of growth provided production costs in the Province are internationally competitive. The bottom line is that development and growth would best be fostered by a receptive regulatory and tax environment that recognizes the special features of the business sector in the Province. A receptive and competitive economic environment would also attract outside investment with all its attendant transfers of knowledge and management expertise. The role of R&D, and the role of universities in transferring to the corporate sector the knowledge produced by R&D, has a place in the development process and needs special recognition.

Chapter V

TAX BASED INCENTIVES FOR INVESTMENT1. Introduction

Business investment is an essential foundation for economic growth and job creation. As part of the investment process, a business may buy materials from other firms, sell new products to customers, and hire employees. In view of these relationships, many people advocate special tax concessions to stimulate business investment. Since New Brunswick residents as a whole will gain from new business investment, it is in the province's best interests to assist this process.

Apart from this general rationale for government financial assistance to stimulate growth, there is another argument for public sharing of the risk of capital loss that accompanies new investment. The Economic Council of Canada has presented the following illustration concerning research and development (R&D) projects to illustrate this argument:

Suppose that there were 100 R&D projects that could be undertaken in totally unrelated fields, each costing \$1 million and each with a 50 percent chance of success. Suppose further that for each successful project, the revenue would be \$4 million, thus generating a profit of \$3 million; for each unsuccessful project, the \$1 million would be lost. If all the projects were undertaken, one would expect about 50 of them to succeed, generating a total profit of \$150 million (50 X \$3 million). When the \$50 million spent on the 50 projects that are expected to fail is subtracted from that amount, there is a net profit of \$100 million for all the projects combined. Yet it is quite conceivable that a firm would hesitate to invest \$1 million if the 50 percent chance of a \$3 million profit were offset by an equivalent chance of losing its investment. If such risk aversion were widespread, most of the 100 projects could remain untackled, and most of the \$100 million gain could remain unrealized. This example illustrates that risk-spreading can be a reason for government to assist the R&D process and that it need not be a reason if firms are not especially reluctant to face risks or if the odds are not good enough, even from society's point of view (Economic Council of Canada, 1983, p. 32).

2. Tax Expenditures with a Focus on Investment

In the following discussion "tax expenditure" refers to relief of certain taxes with a view to encouraging economic activity in a targeted area. The "target" is generally investment, although the tax expenditure may be indirect. For example, a policy to stimulate investment in a particular sector could involve an investment tax credit or, alternatively, it could entail relief of sales tax on the output of the particular industry in question. The former policy operates through the corporate tax (a direct tax) while the latter operates through an indirect tax. In principle it is possible to design alternative tax expenditures to achieve the same purpose. Furthermore, direct expenditures such as grants or low interest loans by the government to the private sector are widely used means to achieve economic objectives of targeted business investment. In practice various market, institutional, or administrative considerations generally result in one scheme being preferred to another.

This chapter outlines specific tax expenditures in force or proposed in other provinces - Quebec, Ontario, Saskatchewan, and Nova Scotia - which are designed expressly to encourage investment in the corporate sector by means of tax credits to financial investors, that is tax relief to purchasers of corporate shares. The intended economic effect is to increase the pool of investible funds and to reduce the corporate cost of capital, and thereby to stimulate real investment. The programs are The Stock Savings Plan in place in Quebec and Saskatchewan and about to be enacted in Nova Scotia, The Employee Share Ownership Plan as proposed in Ontario, and Venture Capital Programs in place in several provinces including Nova Scotia. The focus of the discussion is the relevance of such policies for New Brunswick.

3. Stock Savings Plans

Stock Savings Plans are in vogue following the remarkable success of the Quebec Stock Savings Plan. We will discuss the objectives of stock savings plans, briefly outline the Quebec version, describe the modified plans in Saskatchewan and Nova Scotia, and assess the relevance of similar policy for New Brunswick.

Stock savings plans are intended to direct private sector equity capital to provincial industry. Plans typically provide partial relief of the personal income liability of taxpayers who purchase the equity of designated corporations. The benefit of such programs includes the expanded business activity which would not otherwise exist without intervention to correct capital market imperfections. The costs of such programs include tax revenue foregone and the direct expense of administration. Proper accounting of the tax revenue foregone must recognize the incremental increase in revenue generated from the expanded tax base of the economy stimulated by the program. Neither the Quebec or the Saskatchewan experience indicates undue demands on the provincial tax administration.

4. The Quebec Stock Savings Plan

The Quebec Stock Savings Plan (QSSP) was introduced by the Parti Quebecois government in 1979 with the economic objective of stimulating private sector investment in the province and the political objective of strengthening and increasing the autonomy of the provincial financial system. The QSSP provides an incentive for citizens of Quebec to purchase new issues of voting stock of Quebec-based corporations by allowing a deduction from income equal to the value of the new shares bought. The QSSP has a redistributive dimension. It provides an effective means of lowering the taxes for those taxpayers in the upper levels

of the steeply progressive personal income tax rate structure while ensuring that the savings are channeled into provincial investments.

In the early days, QSSP issues were limited to a few new names with well-seasoned corporations attracting the bulk of investor funds channeled toward the new plan.

Issues Under the Quebec Stock Savings Plan

Year	Quantity	Amount of Issue
1979	4	\$275.2 million
1980	3	120.3
1981	6	74.5
1982	4	140.7
1983	22	566.9
1984	25	257.2
1985	57	849.7

The Quebec Stock Savings Plan has few restrictions. The corporation issuing the eligible common stock must:

- Have at least five full time employees
- Have a wage bill of which at least 50 percent is paid to Quebec residents
- Have less than 50 percent of its assets in the form of other corporate shares, bonds, other property claims, or deposits.

The taxpayer may withdraw his investment from the QSSP after two full years have elapsed without having to bring any extra amounts into income.

With respect to the pricing of QSSP issues, they generally enter the market at a price which reflects the tax benefits. However, the premium is less than the full value of the benefits to the extent that investors expect capital losses. Nevertheless, the premium means that firms are getting capital at reduced cost.

An important feature of provincially sponsored stock savings plans such as QSSP, a feature not present in most other incentive and assistance programs, is that benefits do not affect federal tax payable. An incentive operating through

the provincial personal income tax system does not affect federal taxes and thus there is no need to have the program prescribed under the federal Income Tax Act.

Not all purchases of eligible shares are actually claimed for tax purposes. The fraction depends to a large extent on the level of development of the financial sector of the province. In Quebec in 1979, QSSP deductions for all taxpayers totalled \$49 million in comparison to total equity issues of \$275 million. This indicates that large portions of the shares are purchased by persons or corporations not eligible to claim the specific tax concessions, including pension plans, corporate buyers, insurance companies, persons with no taxable income, and out-of-province buyers.

If no deduction is generated, there is no effective incentive. Where there is a premium on the new issues, those not eligible for the tax benefit may reduce their purchases. This creates what is known as a "financial clientele effect". Rather than stimulating new investment, the Stock Savings Plan may have the effect of inducing provincial residents with taxable income to switch their portfolios away from out-of-province stocks toward stocks eligible under the Plan while corporations, non-taxable individuals and residents do the reverse. The narrower the class of investors able to benefit from the Stock Savings Plan, the more the plan will simply cause portfolio adjustments with small premiums paid for new issues and large rents earned by those who benefit.

Recently, certain new QSSP issues encountered difficulty in the market. They moved slowly, with dealers being forced to carry large inventories of QSSP stock. Although issues of well-known, well-established companies still are sold readily, they do not sell at the high premiums observed in the early days of the Plan. With respect to smaller, more obscure equity issues, their premiums are significantly smaller, reflecting a substantially reduced demand.

Corporations recognize the need to channel new issues to those who can benefit. One approach is to establish employee stock purchase plans. The advantages and disadvantages of government encouragement of such arrangements will be discussed later.

Stocks issued under the QSSP have significantly out-performed other equities over the past five years. From 1982 to 1986 the average annual growth rate for the QSSP stocks has been 36 percent versus, for example, annual growth of 13 percent for the Toronto Stock Exchange Index over the same period. The number of QSSP accounts registered in the province - each investor must have an individual account for tax purposes - grew from 146,000 in 1983 to about 247,000 in 1985.

The success of the QSSP in terms of the objectives of provincially targeted equity investment, together with the provincial government's need for revenue, has prompted the Liberal government to reduce the scope of the Quebec Stock Savings Plan. In December 1986, the Quebec Finance Department announced a reduction in the permitted deduction from provincial income tax under the plan to a maximum of \$5500 or 10 percent of a taxpayer's total income, excluding pension and registered retirement savings plan contributions. Prior to the change, an investor could have deducted the lesser of \$12,000 or 20 percent of total revenue, with pension and RRSP contributions subtracted from the total permitted deduction. In addition:

- the 50 percent deduction (of the cost of QSSP shares) and the ceiling of \$1,000 are now applied to companies with total assets of \$250 million or more, rather than the previous \$1 billion level;
- on subordinate voting shares, individuals will only be allowed to deduct 50 percent of the cost of the shares to a maximum of \$1,000 from the total revenue, unless the issuer is a developing company with under \$10 million in assets;
- for companies with less than \$10 million in assets, on subordinate shares with at least one-tenth the number of votes allowed by other shares in the same company, investors can deduct 75 percent of the total cost of the shares.

These measures are intended to reduce the revenue cost of QSSP. The plan is reported to have involved \$606 million in tax revenue foregone over the past seven years. In the current year, the reigning in of the QSSP is expected to result in a revenue cost of \$80 million, down from \$180 million in 1985.

To obtain a rough estimate of the fiscal cost for New Brunswick of a stock savings plan similar to the QSSP inclusive of its recent modifications, we may apply a simple factor to scale for the difference in size between Quebec and New Brunswick. For example, taxes on corporate income are estimated for 1985-86 to be \$349.3 million in Quebec and \$79.6 million in New Brunswick. On the basis of this relationship, the fiscal cost of a stock savings plan for New Brunswick (assuming the cost for Quebec is \$80 million) is approximately \$18 million. On the other hand, estimated 1985-86 taxes on personal income are \$8,054.4 million in Quebec and \$381.9 million in New Brunswick. On the basis of this relationship, an estimate of the cost of the stock savings plan in New Brunswick is only \$4 million. Since personal income taxes are the source of revenue foregone under stock savings plan, the latter estimate is perhaps more appropriate than the higher estimate based on corporate tax figures. Regardless, since the Quebec plan was heavily subscribed because of exceptionally high marginal personal tax rates in the province and in light of the ready financial infrastructure to accommodate the plan in Quebec, estimates based on simple scale factors between the two provinces are likely to err on the high side with respect of the cost of a stock savings plan for New Brunswick.

Other Canadian provinces, impressed by the success of the Quebec Stock Savings Plan, have introduced or are about to introduce similar incentives to increase equity to local companies. However, clones are difficult to design because no other province has its own income tax as is the case in Quebec. Furthermore, Quebec has a well-developed financial sector within the province, including the Montreal Stock Exchange. Smaller provinces are potentially at a

disadvantage in establishing equity investment programs such as QSSP that are based on the issuance of stock by individual corporations.

4. The Stock Savings Tax Credit Act of Saskatchewan

The Saskatchewan Stock Savings Credit Plan passed into law in June 1986. It provides investors in new shares of eligible companies a 30 percent tax credit to a maximum of \$3,000 per year. Eligible firms must pay a minimum of 25 percent of their salaries and wages in the province, they cannot have more than \$500 million in assets, they must be Canadian controlled companies and they must be listed on a Canadian stock exchange. The Saskatchewan plan thus specifies a lower creditable share of the issue price of the stock than in Quebec, and Saskatchewan has a lower maximum credit. On the other hand, Saskatchewan in some respects is less demanding on the characteristics of firm-eligibility, with its minimum 25 percent salaries/wages restriction versus 50 percent in Quebec, and maximum asset size of \$500 million versus \$250 million under the recently modified Quebec plan.

In Saskatchewan, the Department of Finance reviews applications and issues eligibility certificates to qualifying companies. Eligible investments are newly issued treasury shares of the qualifying corporation. Shares are not eligible if any federal tax credits apply to them. Once the Department of Finance issues the certificate, an investor's share purchases must be deposited in a plan that is administered by a Saskatchewan investment dealer. The investor must maintain shares in the stock savings plan for two complete years following the year of purchase. However, the stocks held in the plan can change. Any unused stock savings credit may be carried forward for seven years.

5. The Nova Scotia Proposal

In the April 1986 provincial budget in Nova Scotia it was announced that a committee was to be struck to create a stock savings plan for the 1987 taxation year. The scheme would offer a tax credit against provincial personal tax payable and, unlike the Quebec and Saskatchewan programs, Nova Scotia would extend the plan to include private companies. The legislation for the Nova Scotia Stock Savings Plan is currently being drafted. The following remarks are based for the most part on conversations with officials in the Nova Scotia Department of Finance.

The objective of the Nova Scotia plan is to provide capital for provincial industry, especially small business. The savings rate in Nova Scotia has traditionally been high and thus the stock savings plan is intended more to direct savings than to expand them. In terms of structure, Nova Scotia will closely follow the Saskatchewan model. In contrast, however, Nova Scotia will allow two rates in the calculation of allowable credit.

By extending the coverage of the stock savings plan to include issues of private as well as public corporations, Nova Scotia faces certain problems in administration and maintenance of the integrity of the plan. Nova Scotia has no securities and exchange commission. Including private companies creates the difficulty of ensuring full and reliable disclosure of financial information of such companies in order to protect the interests of investors. One suggested approach to the problem of risk to uninformed investors in private companies is to require an affidavit signed by the investor confirming that he has sought professional investor counselling and advice and that thus he or she is satisfied regarding the information underlying the decision-information pertaining to corporate ownership, finances, growth potential, dividend payout, et cetera. The requirement of a formal declaration regarding sufficient

information effectively shifts the risk of the investment to the investor and exonerates the stock savings plan from being a vehicle of securities that fail.

6. Employee Share Ownership Plans

Many governments have developed special tax concessions that assist employees to buy shares in the corporation for which they work. These programs hope to stimulate investment in the same manner as the stock savings plans described above. They have an additional objective: to foster closer labour-management cooperation in the effort to improve productivity.

Robert Reich, whose views have been shaped by Japan's experience, has emphasized the importance of new labour-management relationships:

The success of modern Japan, in particular, seems to contradict Max Weber, the German sociologist, who attributed the West's economic progress to the demise of traditional relations like guilds, parishes, and clans and to the simultaneous rise of individualism. Japan's emphasis on community, consensus, the long-term security for its workers - based squarely on traditional communal relationships - appears to have spurred its citizens to greater feats of production than has the rugged individualism of modern America... (Reich, 1983, p. 16).

A social organization premised on equity, security, and participation will generate greater productivity than one premised on greed and fear. Collaboration and collective adaptation are coming to be more important to an industrialized nation's well-being than are personal daring and ambition (Reich, 1983, p. 20).

Reich places great emphasis on what he terms "flexible-system production." The era of standardized mass production is disappearing in the Western world, largely because the newly industrialized countries are able to manufacture at much lower costs. In its place has come a demand for commodities that are unique or that have small production runs. In Reich's opinion, such commodities require innovation as well as special skills. All workers must be involved in the development of the product. The traditional corporate command structure cannot respond quickly or appropriately enough to the customers' specialized needs. New patterns of corporate organization are necessary, Reich argues -

patterns that foster entrepreneurial attitudes among all workers.

Other advanced nations may be compelled to copy Japan in developing this active involvement by labour in the innovation process. In his book, How American Business Can Meet the Japanese Challenge, Ouchi (1981, p. 50) has gone so far as to claim that in Japan "nothing of consequence occurs as a result of individual effort." The participative approach to decision-making requires the exploration of alternative solutions by managers and production workers until a consensus is reached. This process minimizes the role of middle management by bringing senior management into direct contact with the workers.

Currently, many Western corporations are attempting to introduce some elements of the Japanese approach and to imbue production workers with more feeling for their company's objectives and success. "Quality circles" require groups of employees to develop new techniques to improve the quality of the product they are manufacturing. The expansion of profit sharing is based on a hope that production workers will be more conscientious and creative so that their firm will benefit.

Some authors, like Reich, believe that a basic change in social attitudes and in government intervention will be necessary in other countries to attain Japan's pervasive entrepreneurial initiative.

Ontario introduced a new employee share ownership plan in 1986. The province now provides employees of small and medium-sized Ontario businesses with a 15 percent tax credit on up to \$2,000 of annual stock purchases. These shares must be newly-issued by their employers' corporations. As an inducement for corporations to issue new shares for this program, the province will compensate them for one-third of the cost of setting up the plan to a maximum of \$10,000.

It is important to be aware of the greater risk that such a program places on the employee. If the corporation suffers economic hardship, the employee

will lose in terms of wages and also in terms of the value of his or her investments. If the corporation should cease operations as a result of bankruptcy, the employee may lose both his or her job as well as his or her savings. This perspective emphasizes the need for political judgement in deciding whether to introduce such a program. While an employee share ownership plan will stimulate productivity and growth, nevertheless, it may expose some participants to extreme misfortune.

7. Quebec's Labour Sponsored Venture Capital Program

The Quebec Labour sponsored venture capital program was initiated by the creation of a \$20 million investment fund from interest free loans of \$10 million from each of the federal and Quebec governments. The fund is managed by a Board of Directors drawn from the Quebec labour movement. At least 60% of the fund's holdings must be in Quebec equities. The fund acquires additional financing by selling shares to investors who in turn qualify for a tax break. An individual can receive a credit against Quebec personal income tax equal to 20% of the share purchase cost as well as a 20% credit against federal income tax. The maximum investment on which the full credit applies is \$3500. An additional provision allows this investment to be treated as an RRSP if it is held until retirement.

8. Investment Tax Credits

Investment tax credits enable a business to deduct the dollar amount of its annual investment from its income of that year in calculating its income tax. By reducing the tax payable, they can be a powerful incentive to invest. These credits can be designed in a variety of ways. For example, they can provide that a business must have created new jobs as part of its investment process in order to qualify. In this way, they can be a joint investment - employment tax

credit. They can be restricted to small corporations; they can be applied to both small and large corporations; they can be provided to unincorporated economic activities as well as corporations; they can be restricted to manufacturing or they can be provided to the service sector as well. Credits can be "refundable" in that they can entail a government rebate if the activity lacks adequate taxable income to utilize them or their application can be limited to the amount of that activity's income.

Our recommendations include the introduction of new investment tax credits. The following chapters devote considerable attention to this method of stimulating growth and job creation. We leave the mechanics of designing these credits to the political judgement of the New Brunswick government. However, we do suggest that special attention be devoted to assisting joint corporate-university activities that involve the commercial application of university research.

9. Venture Capital Programs

A venture capital program is a more sharply focussed means of directing capital to new industry. A venture capital program involves direct government outlays in the form of grants and loans as opposed to tax expenditures within a stock savings plan. Direct financial support of an industry that eventually fails is the negative side of the risk of the business as born partially by the government. Also on the negative side is the need for civil servants to devote considerable time to the evaluation of alternative applications, and to the negotiation of terms and conditions for the grant or loan. In spite of these risks and administrative difficulties, many provincial governments have established venture capital programs. As the years have passed, governments have modified and extended their venture capital programs to meet new goals.

Ontario's 1986 budget contained several examples of this approach. A new \$1 billion technology fund was established to support new ventures that will link university research with commercial applications. Corporate and university requests for financial assistance will be evaluated by a new Premier's Council. The Ontario Development Corporation which has provided support for small business over many years is being expanded. It now includes a "New Ventures" program that provides loan guarantees of up to \$15,000 to newly-established businesses, together with business advice to new entrepreneurs. A new program, "Innovation Ontario" will provide pre-venture capital assistance to small businesses in the high-tech field. The "Ontario Small Business Development Corporations" (SBDC) has been expanded to provide assistance to firms in the service sector as well as the manufacturing sector.

10. New Brunswick's Venture Capital Program

The venture capital program in New Brunswick is not tied in with the tax system. A venture capital company may be eligible for loans from the Government to cover 35 percent of an eligible investment by the corporation to a maximum of \$500,000 per investment. The loan is interest free for seven years, but must be repaid by the end of the 10th year. The eligible investments include manufacturing and processing, and certain tourism activities. The company must be private and ordinarily have annual sales of less than \$10 million.

If the venture capital company receives any dividends from the operating company, 35 percent of such dividends must be paid to the province. If a company in which a venture capital corporation invests should fail, the province will write-off the full amount of the money loaned to make the investment.

11. Issues Referred to the Tax Review

In this section, certain tax reform options that have been proposed for the

province are analyzed in the context of the above discussion.

A. Stock Savings Plans

New Brunswick should not hurry into a provincial stock savings plan. Several factors lead to this conclusion.

First, as indicated above, the strong acceptance of the Quebec Stock Savings Plan - a result which has prompted other provinces to emulate the QSSP - is to a large extent attributable to institutional, fiscal, and political factors specific to Quebec which jointly contributed to the private sector acceptance of the Plan. Such factors as a provincially-run personal income tax, steeply progressive marginal tax rates on personal income, a well-developed financial sector including a stock exchange, a political initiative to increase the economic and financial autonomy of the province, and a relatively large and diversified corporate sector, all played a part in the success of the QSSP. Furthermore, the QSSP was well-timed. In the era of high inflation and high nominal interest rates, the QSSP was able to assist both individual investors and corporations wishing to expand. Previously, corporations had been depending heavily on debt finance due to the difficulty in raising equity. Furthermore, the interaction of high nominal interest rates and the deductibility of interest drove down the after-tax cost of debt. Most of the debt was held by non-taxable financial institutions and thus individuals had little incentive to participate directly in corporate finance. The QSSP provided such an incentive for investors and stimulated the issuance of equity.

The second reason for New Brunswick to be circumspect concerning a stock savings plan is that it is not clear that the ostensible purpose of the policy is in fact what is achieved by the policy in this form, even with the undeniable heavy subscription to the QSSP. Investment incentives which operate through finance may end up for the most part as capitalized tax savings by the holders

of the equity issues with little or no associated increase in real investment. To assess this issue, it is convenient to view private industry as having a sequential set of business risks regarding investment: development risk, production risk, management risk, marketing risk, and growth risk. Development and analysis or production to determine feasibility are conceptual and experimental and, in a market economy, are generally financed with equity contributed by those directly involved with the fledgling enterprise. The commitment to establish operations brings with it management risk and marketing risk; venture capital is the principal source of finance for untried undertakings. Finally, the established but financially constrained business requires more permanent capital to finance growth; the risk of this form of investment is such that the relatively uninformed public is generally willing to provide equity capital. Thus equity induced by a stock savings plan is directed primarily at established firms with growth potential otherwise constrained by finance. A stock savings plan should not be viewed as substitute for a venture capital program. The question for New Brunswick is whether to introduce a personal tax expenditure to encourage the growth of established firms, in which case a QSSP-type program has some potential merit, or whether the policy objective is to offset the capital market imperfection that hinders the establishment of new and innovative enterprise, in which case the focus should be on a venture capital program, and on new investment tax credits and employment tax credits.

B. Employee Share Ownership Plans

We have discussed the increasing emphasis within many activities on trying to encourage employee involvement in productivity and quality improvements. Tax concessions for employees who purchase shares in the company for which they work

are one method of encouraging this involvement. We have described the new 1986 Ontario program that introduces this type of tax concession.

We have drawn attention to the kind of risk that such a program places on the employee. If the corporation suffers economic hardship, then the employee will lose in terms of wages and also in terms of the value of his or her investments. The employee, in a time of economic recession, could lose both a job and savings. In view of this risk, New Brunswick should weigh the advantages and disadvantages carefully.

The recent Quebec approach of offering tax concessions to labour unions in accordance with their purchases of corporate shares may, hopefully, improve management-labour co-operation, while perhaps exposing each employee to less risk of losing both a job and investments. That is, the approach of channelling the concession through union group purchases of shares may permit a diversification of portfolio for the individual. On the other hand, this intermediation by the labour union may separate the employee from his or her personal investment to the degree that the basic incentive purpose may be negated.

C. Investment Tax Credits

These will be discussed in considerable detail in following chapters. At this point, it is sufficient to note that they are, in many respects, an alternative to the stock savings plans, and venture capital programs.

D. Venture Capital Programs

Expenditure programs providing direct grants or loans are an alternative approach to stimulating investment. Reliance on expenditures means that the extent of government assistance is quantified more clearly. The public accounts indicate how much money each firm receives for each purpose. This enhances

political accountability to the legislature and the electorate. Furthermore, it brings civil servants directly into the decisions about each grant. This also leaves the tax system less cluttered, without various tax concessions.

On the other hand, some observers question the ability of civil servants to make these allocation decisions wisely. Furthermore, new administrative procedures requiring forms, proposals, and negotiated agreements can involve considerable time and expense for the businessman.

12. Recommendations

A. Stock Savings Plans

We recommend that New Brunswick not adopt a general program of this type at this time. New Brunswick's economy and financial practices are not at a stage where such a program could be as effective as that of Quebec.

B. Employee Share Ownership Plans

We believe that the labour union sponsored plans will not significantly increase the involvement of employees in business efforts to improve productivity and quality. Only a direct financial commitment by the employee in the firm for which he or she works will be able to do this. Hence, we recommend that any new program of this type should follow only the latter approach. We do recommend that New Brunswick implement such a program recognizing that it will have to be evaluated over time in terms of its effectiveness, and also in terms of the practical consequences for employees of investment losses. Perhaps a government-sponsored insurance program could be devised to limit the extent of personal investment losses.

C. Investment Tax Credits

We recommend the introduction of new investment tax credits, and these are

discussed in later chapters.

D. Venture Capital Programs

A political judgement is involved in the advocacy of such programs, with an evaluation of administrative difficulties and of civil service abilities to choose investments appropriately. As we have indicated throughout our manuscript, our focus is on the tax system rather than expenditures. Nevertheless, the consideration of the expenditure role of government is necessary here. Our recommendation is to prefer investment tax credits since they can be designed to apply to all activities without the need for a complex screening process with individual applications.

Chapter VI

THE PERSONAL INCOME TAX1. Introduction

This major dimension of the integrated federal/provincial tax system can at most be incrementally adjusted by New Brunswick via adjustments of the provincial rates applied to federal basic tax or through changes in provincial tax credits. Nevertheless, given the overwhelming importance of the personal income tax both as a revenue source and as an influence on private sector economic decisions, it is important to look closely at the incidence and potential shifting of this tax in order to reveal its impact on employment, investment, and growth. In addition, the role of personal tax credits for distributional purposes must be explicitly addressed, for example as pertinent to the need to off-set the regressive effect of increased reliance on indirect taxes or to target relief to specific sectors such as the senior citizen group.

2. Recent Tax Initiatives in Other Provinces

In 1987, the budgets of British Columbia and Alberta included substantial tax increases in both cases. Since the fundamental public finance objectives and constraints of these provinces - to increase revenue, to encourage growth, and to do so within the terms of the federal/provincial tax agreement - are similar to the situation of New Brunswick, a review of the main points of the revenue side of the B.C. and Alberta budgets is in order.

British Columbia

In British Columbia the major tax changes involve substantial increases in direct taxes - through hikes in provincial income tax rates and rates on small

business corporations. Provincial income taxes will rise across the board to 51 percent of federal tax, up from the 44-48 percent range. The small business corporate tax rises to 11 percent from 8 percent.

With respect to indirect taxes, the provincial sales tax rate is reduced to 6 percent from 7 percent. The 7 percent tax on restaurant meals is removed.

The revenue impact of the tax changes is estimated to be an increase of \$183 million, compared to a consolidated revenue figure of approximately \$10.5 billion.

Alberta

Alberta has introduced substantial increases in personal and corporate income taxes. Provincial income tax rates will rise from 43.5 percent of federal income tax to 46.5 percent with an additional flat tax of 1 percent. Persons with taxable income of more than \$36,000 will pay a surtax of 8 percent. Despite these changes, Albertans will continue to pay slightly less personal income tax than citizens in British Columbia, Saskatchewan, and Ontario.

The Alberta corporate income tax rate increases from 10 percent to 15 percent.

Alberta has introduced several additional revenue generating policies, including:

- a 5 percent tax on all hotel and motel rooms
- an increase in automobile registration fees, with a larger increase for passenger vehicles than for commercial vehicles
- an increase in health insurance premiums
- increased markup on alcoholic beverages

Alberta estimates an increase in government revenues from these changes of \$992 million within a total revenue picture of approximately \$15 billion.

(Alberta has also announced that \$262 million that would have gone to the Heritage Funds will be directed to general revenue.)

3. On Progressivity

The term "progressivity" refers to the degree to which high-income groups pay a larger percentage of their income in taxes, in comparison with low-income groups. With respect to personal income tax, the province of New Brunswick has a number of policy options available with which to affect the degree of progressivity of this particular tax. Here we shall consider surtaxes, flat taxes, and tax credits. Adjusting the progressivity of the income tax can be done with a view to altering the progressivity of the overall tax structure.

The progressivity of the income tax, as far as New Brunswick is concerned, is largely pre-determined by the federal government through the federal definition of the tax base and the progressive structure of federal rates. Under federal-provincial tax collection arrangements of the last two decades the Government of Canada has undertaken to collect personal income taxes for New Brunswick, as is the case for all provinces with the exception of Quebec.

The New Brunswick tax is a simple percentage of the federal tax. The calculation is made at the end of the federal form after the Federal tax has been determined. Thus, New Brunswick cannot directly adjust the provincial income tax base and the progressivity of the structure of income taxation. A province may apply a tax rate of any percentage that it deems appropriate against the federal basic tax. Provincial taxes tend to be in the range of one-half the federal tax. The provincial rates for 1985 are given below.

A province can modify its personal income tax (PIT) by allowing for special tax credits. These can be geared to specific expenditures like home heating costs or mortgage interest payments. Or they can be aimed at designated groups

Provincial Personal Income Tax Rates, 1987*

(As percent of federal basic tax)

Newfoundland	60.0
Prince Edward Island	55.0
Nova Scotia	56.5
NEW BRUNSWICK	58.0
Quebec	n/a
Ontario	50.0
Manitoba	54.0
Saskatchewan	50.0
Alberta	46.5
British Columbia	51.0
Yukon	45.0
Northwest Territories	43.0

* As of 15 June 1987, only Saskatchewan's budget for 1987-88 had not yet been presented.

such as senior citizens. Tax credits can also be based solely on income level as a means of relieving the tax burden on low-income families. The possibility of introducing new tax credits deserves consideration in New Brunswick as a means of modifying the progressivity of the PIT and, thereby, the progressivity of the overall tax system. Furthermore, special credits can be designed for purposes of economic incentive.

A province can also modify its PIT by imposing a surtax on top of the taxes collected in accordance with the provincial rates cited above. A surtax can be designed in many different ways so as to achieve varying degrees of progressivity. Several provinces have introduced surtax modifications to their PIT rates.

Another modification of the PIT is to impose a provincial "flat tax" of a stipulated percentage on personal taxable income. By restricting the flat tax to individuals earning more than a certain income level, progressivity can be dramatically altered. Each of these PIT modifications deserves careful consideration in possible changes to the New Brunswick tax system.

4. PIT Credits

Because of the requirement for uniform legislation on the definition and computation of the income, exemptions, et cetera, New Brunswick, like other provinces, is restricted to introducing variations to meet provincial fiscal objectives through credits against the tax as finally computed. These credits have been acceptable to the federal government if in its judgement they comply with three criteria established in 1971. The general test is that the credit should not alter the basic progressivity of the personal income tax. Furthermore, the tax credit must also be (1) an allowance for other taxes actually paid; (2) granted to all residents of the province, whether taxpayers or not, and (3) of a character that can be administered. Within these limitations Ontario was the first province to enact credits in 1972 and it has had a tax credit program ever since. All western provinces have also had programs of varying types and durations, but there has been limited use in the Atlantic Provinces. While the federal government relaxed its conditions somewhat in 1974, it continued to reject requests for credits of certain types.

The actual measures have been aimed more at social than economic objectives. For example, Ontario and the western provinces have introduced credits which exclude low income groups from taxability, frequently to match the federal exclusion. Another objective pursued by Ontario, Manitoba, Alberta, and British Columbia has been to provide relief of the property tax through credits to owners or renters or both. The same group of provinces, along with Nova Scotia and New Brunswick, give a nonrefundable tax credit for political contributions. All western provinces allow a rebate for taxes paid on natural resource royalties (arising from the federal disallowance of royalties as an

income deduction). Ontario had a temporary home heating assistance credit. Saskatchewan had a mortgage interest tax credit until 1982 when it was replaced by a program for direct reimbursement of mortgage interest. In all cases of credits against personal income tax liability - refundable or nonrefundable - an upper limit on the credit is specified. For example, in Ontario the combined total of Property and Sales Tax Credits may not exceed \$500.

5. Credits for Senior Citizens or Other Designated Groups

Credit programs may be tailored to specific groups, such as senior citizens. Ontario has introduced an income tax credit program for low-income and senior citizens. Low income taxpayers under the age of 65 are granted a credit calculated under a formula in recognition of property and sales taxes paid (either directly or indirectly as tenants) and (temporarily) high energy costs. For senior taxpayers these credits are paid irrespective of income and do not form part of the income tax. Thus the Ontario Government provides annual grants of up to \$500 per household to offset municipal and school taxes paid by those over 65 years of age who own or rent their homes. This means that regardless of personal income the first \$500 of a senior's annual property tax, whether paid directly or through rent, is refunded by the Property Tax Grant. The details of the program are found in Topical Tax Reports (Ontario, OCH Canadian, 1987, paragraph 15-851, a description of the Ontario Pensioners Property Tax Assistance Act, 1980).

Saskatchewan has the Senior Citizens' Heritage Program to provide grants to those above 65 years of age. Such persons who have been resident in Saskatchewan for at least six months and who have valid Saskatchewan Health Service cards and who are not nursing home residents may apply annually to the minister for a grant. The amount of the grant depends on the combined annual

income of the eligible applicant and spouse. Where the combined income is less than \$25,000 the amount of the grant is \$700 for a couple and \$500 for a single applicant. The amount of the grant diminishes for higher income levels and/or if the applicant resides in public housing. Only one application per year per couple is permitted. The application must be accompanied by (1) evidence that the applicant or spouse has filed or will file a federal income tax return for the year preceding the current year and the annual income of the applicant or spouse for that period, (2) evidence sufficient to determine whether the applicant resides in public housing, and (3) social insurance numbers. The law is The Senior Citizens' Heritage Program Act of Saskatchewan, S.S. 1984-85, c.S-46.01, ss.2,5(1); parag. 97-352,97-356. A description is found in Topical Tax Reports (Saskatchewan), OCH Canadian, 1986, parag. 10-017a.

6. Personal Income Tax Credits for Purposes of Economic Incentive

The federal government has been very reluctant to agree to any form of allowance proposed by the provinces that involves a province's use of the income tax system to directly stimulate investment. The federal view is that investment incentives are properly a federal prerogative; decentralization of investment policy linked to the income tax system creates a risk of uncoordinated interference of national investment flows and could lead to destructive interprovincial tax competition.

In 1978-79 the federal government refused to agree to a proposal for a dividend tax credit limited to companies having their head office in the province of British Columbia. Indeed, a tax credit for dividend income is not given specifically under any provincial legislation.

In September 1982 the federal government agreed to administer a flat rate tax credit for interest received by British Columbia taxpayers from an issue of provincial government bonds used to finance housing and employment development

in the province. The rebate of the provincial tax clearly allowed the provincial government to raise money at a lower interest rate, akin to tax-free state and municipal bonds in the United States. For individuals, the flat-rate credit was 13.5 percent of bond interest received, the flat rate being relatively more helpful for low- and middle-income taxpayers.

With the British Columbia precedent, the federal government has signalled a more flexible position on credits than it took when it dismissed similar proposals put forward earlier by Alberta and (on another issue) by British Columbia. There is little relevant difference between the accepted British Columbia credit and the rejected proposal of Alberta (1980) for a rental investment tax credit which was similarly limited to Alberta tax payable and designed to ease the flow of funds into the housing market.

The British Columbia credit compromises federal criteria for administering tax credits, including the requirement that credits not impair economic harmony. The British Columbia credit is an unequivocal intervention in the capital market for provincial purposes. The credit also involves a redefinition of taxable income, a rationale for disallowing proposals in the past. In general, whether these changes are isolated occurrences or the start of a new trend for permitted provincial policy of tax-based economic incentives is not clear. It is nevertheless encouraging for New Brunswick to the extent it increases the degrees of freedom in provincial tax policy. The key point is that there is now precedent and increased scope for negotiation with the federal government on the use of credits in the tax system. As discussed in Chapter V above, Saskatchewan recently established a Stock Savings Tax Credit in 1986.

7. Surtaxes

For the purpose of increasing rather than relieving personal income tax, Ontario, Manitoba, Saskatchewan and British Columbia have imposed surtaxes in

addition to the basic tax. For example, in Saskatchewan the surtax is 12 percent of provincial tax in excess of \$4,000. Ontario imposes both a surtax and a surcharge, the distinction being that a "surtax" is a "temporary surcharge". Effective for 1986 and subsequent tax years a surcharge is imposed of 3 percent of Ontario tax payable in excess of \$5,000, calculated before foreign tax credit, property tax credit and sales tax credit deductions. The "temporariness" of this law is not clear. The surcharge was introduced in 1985 to be applied in 1986 only. Later, it was amended to continue for 1987 and subsequent taxation years.

Prior to their 1987 Budget, British Columbia imposed a surtax on high income taxpayers since taxation year 1981. The surtax was 10 percent of provincial personal income tax payable in excess of \$3,500. This extra tax was calculated on provincial tax payable after allowances for the foreign tax credit and royalty rebate but before any other provincial tax credit is applied. If, for example, a taxpayer having a taxable income of \$36,000 was, without this measure, required to pay \$3,830 provincial income tax, the 10 percent surtax applied to the amount in excess of \$3,500, in this case \$330, and the surtax increased provincial income tax payable by \$33.

British Columbia also imposes a Health Care Maintenance Surtax. This surtax was added by the 1984 Budget to offset increased health care expenditures in the province. The percentage is added to the prevailing rate in effect. Finally, a Health Care Maintenance Levy is also provided for in B.C. and it too shall be administered by the government of Canada under proposed amendments to the Canada-British Columbia tax collection agreement. The Health Care Maintenance Levy provides for a prescribed amount of increase for the health care levy where one's taxable income exceeds a prescribed amount. This is similar to the personal surtax in that both apply contingently to high income

earners. However, no such amount has yet been prescribed nor has the section been proclaimed into force.

8. Flat Taxes

A flat tax can be calculated as a straightforward percentage of personal taxable income or net income. It could be designed as a proportional tax, taking the same percentage from everyone's income. In practise, flat taxes have usually been designed to exempt everyone earning less than a stipulated income level. By restricting the flat tax to individuals earning more than the stipulated income level, taxpayers are divided into tax groups. Designed in this way, a flat tax sharply increases progressivity for those near the dividing line. Yet above the stipulated income level the flat tax is a proportional tax, collecting the same percentage of income from the middle-income earners and from the very rich. From this perspective, a flat tax provides one more mechanism for fine-tuning the PIT's progressivity.

Another feature of the flat tax deserves special mention. It is levied against personal taxable income, and so it is calculated before any of the long list of deductions and exemptions permitted by the federal government. This has two important results. First, it prevents tax avoidance by the wealthy who may have utilized various loopholes to reduce their tax burden. Hence, it serves as a minimum tax. This may be desirable for equity reasons in addition to the progressivity feature. Second, since it is not reduced by deductions and exemptions, it is able to raise a large revenue. Calculations using New Brunswick income and tax data indicate that a 1 percent flat tax imposed on taxpayers with incomes over \$20,000 would yield \$35 million annually. This is a relatively large revenue potential. In view of these attributes, we recommend that New Brunswick give serious consideration to a new flat tax as a means of making up revenue losses due to tax concessions recommended in other chapters.

9. Issues Referred to the Tax Review for Consideration

A. The Role of Credits and Surtaxes to Adjust the Progressivity of the PIT

The term "progressivity" refers to the degree to which high-income groups pay a larger percentage of their income in taxes, in comparison with low-income groups. With respect to personal income tax, the province of New Brunswick could introduce credits and/or surtaxes to adjust the degree of progressivity of the PIT. In view of the significant role of the PIT as a revenue source, adjusting the progressivity of the income tax can be done with a view to altering the progressivity of the overall tax structure.

The progressivity of the income tax, as far as New Brunswick is concerned, is largely pre-determined by the federal government through the federal definition of the tax base and the progressive structure of federal rates. Under federal-provincial tax collection arrangements of the last two decades the Government of Canada has undertaken to collect personal income taxes for New Brunswick, as is the case for other provinces with the exception of Quebec.

A province can modify its personal income tax (PIT) by allowing for special tax credits. These can be geared to specific expenditures like home heating costs or mortgage interest payments. Or they can be aimed at designated groups such as senior citizens. Tax credits can also be based solely on income level as a means of relieving the tax burden on low-income families. The possibility of introducing new tax credits deserves consideration in New Brunswick, as a means of modifying the progressivity of the PIT and, thereby, the progressivity of the overall tax system.

For the purpose of increasing rather than relieving personal income tax, Ontario, Manitoba, and Saskatchewan have imposed surtaxes in addition to the basic tax. In Ontario's case, two surtaxes have been introduced, with a higher surtax rate to be applied above a certain level of tax payable.

B. Special PIT Treatment for Seniors

Credit programs may be tailored to specific groups, such as senior citizens. Ontario has introduced an income tax credit program for low-income and senior citizens. Low income taxpayers under the age of 65 are granted a credit calculated under a formula in recognition of property and sales taxes paid (either directly or indirectly as tenants) and (temporarily) high energy costs. For senior taxpayers these credits are paid irrespective of income and do not form part of the income tax. Thus the Ontario Government provides annual grants of up to \$500 per household to offset municipal and school taxes paid by those over 65 years of age who own or rent their homes. This means that regardless of personal income the first \$500 of a senior's annual property tax, whether paid directly or through rent, is refunded by the Property Tax Grant.

Saskatchewan has the Senior Citizen's Heritage Program to provide grants to those above 65 years of age. Such persons who have been resident in Saskatchewan for at least six months and who have valid Saskatchewan Health Service cards and who are not nursing home residents may apply annually to the minister for a grant. The amount of the grant depends on the combined annual income of the eligible applicant and spouse.

12. Recommendations

A. In a later chapter, we recommend that the base of the retail sales tax be broadened to include some of the goods and services that are currently exempted from tax. We also recommend that all residential property be taxed at the same rate. We recognize that, by themselves, these measures may increase the tax burden of low-income groups and will disrupt the previous degree of progressivity in the overall tax system. New tax credits in the personal income tax can redress the balance. A new low-income tax credit should be designed to

offset the tax increases entailed in reform of the sales tax and possibly the property tax.

B. If establishing one residential rate is achieved by increasing homeowners' property tax, seniors may be particularly hard hit. At this stage in life, seniors may find it impossible to adjust their incomes and expenditures. Consequently, we recommend a new tax credit for seniors to offset such an increase, if the government chooses this course.

C. We recommend consideration of the introduction of a new flat tax on taxpayers with incomes over \$20,000 as a preferred means of making up the revenue losses associated with other tax changes. This change would not cause significant economic distortions or inequities.

Chapter VII

CORPORATE INCOME TAX

1. Introduction

Although the primary purpose of taxation is to raise revenue, the tax system is also used as an instrument of economic policy. There are numerous possible goals of economic policy and this chapter will focus on three of them only -- the goals of growth, employment and equity. Specifically, this chapter considers the corporation income tax as an instrument in these regards and will analyze the potential for the provincial government of New Brunswick to utilize this tax for such policy objectives.

The chapter begins with a brief overview of the corporation income tax in Canada as it presently exists. This is followed by a brief survey of the direction of corporation income tax reform in North America as enacted recently in the United States and as proposed in 1985 by the Federal Government of Canada. In the next section there is a general discussion of using the corporation income tax for policy objectives such as growth, employment and equity which is followed by a section that directly addresses possible New Brunswick reforms in this regard. This section will also discuss the possibility of increasing provincial revenue by changes in the corporation income tax or by levying a related provincial tax such as a corporate capital tax. The chapter concludes with a list of recommended reforms with brief supporting arguments.

2. The Corporation Income Tax in Canada

The corporation income tax in Canada is the second largest source of revenue for the Federal government but only the fourth largest source for the provinces. Moreover, the share of total revenue collected through the

corporation income tax has declined steadily since the 1950s at both the federal and provincial levels. The provincial corporation income tax is collected by the federal government in all provinces except Alberta, Ontario and Quebec which collect their own. As a participant in the Tax Collection Agreement, significant limitations are placed on the flexibility of provincial corporate tax policy in New Brunswick. In particular, the province must adhere to the corporate income tax base as defined by the federal government in terms of taxable income, exemptions and deductions. The province is free to set its own rate although the federal government does set a basic ten percentage point abatement. All provinces set rates in excess of this basic abatement. The province can also introduce tax credits and rebates although these are subject to Federal approval. With respect to such provincial credits, the federal government tax collection procedures are essentially limited to "checking the arithmetic" and it is up to the province to assure that the credits are not being abused.

The corporate tax base as defined by the federal government, while far from being consistent in terms of economic philosophy, does pay lip service, at least, to a number of principles. The first views the corporate income tax as an adjunct to the personal income tax and provides some relief from the double taxation of dividend income by the means of a dividend tax credit. The dividend tax credit in Canada does not, however, fully integrate corporate and personal income because it is set so as to credit the average corporate tax paid per dollar of dividends distributed rather than the corporate tax actually paid by the company issuing the dividend. Thus there is under-integration for tax paying corporations and over-integration for non-taxable corporations. The latter are considerably more important in Canada than in other countries because of the magnitude of their carried over losses.

A second principle that underlies the corporation income tax in Canada is the accrual principle. The accrual principle requires that capital costs be amortized and deducted over the life of the asset rather than at the time the asset is acquired as under a cash-flow system. Where immediate expensing is allowed, as in the case of some resource-based industries and for R&D capital, it is considered a special incentive. While the corporation tax is levied in principle on an accrual basis, it is badly distorted both by the corporate tax provisions themselves and by the presence of inflation. The provisions themselves presently allow for accelerated depreciation meaning that the asset costs are written off over a much shorter interval than the asset's lifetime. In addition, there is no attempt to adjust the capital costs for changes in the purchasing power of money over time so, in the presence of inflation, the accrual system is very imperfect. In fact, the evolution of the corporation income tax system over the past decade and a half has largely been the result of a series of ad hoc changes designed to mitigate the effect of rising inflation on the corporation tax liability.

Third, the corporation income tax has been viewed as an important instrument of industrial policy in Canada as in many other countries. Noteworthy in this regard is the special rate on manufacturing and processing, the R&D and investment tax credits, special provisions for the resource industries, special rates and credits for slow growth regions and the reduced rate for small business corporations.

The important point is that under the Tax Collection Agreement, the Province of New Brunswick is essentially committed to the federal corporation income tax base as it is presently defined and as it will be reformed. As such it is also committed to the underlying economic philosophy and policy implications of the tax base. It should be stressed, however, that although provincial flexibility would be greater if New Brunswick levied its own

corporation income tax, there would be a significant increase in costs both to New Brunswick and to the corporations resident in the province in the form of increased paperwork. Moreover, it is not clear that the increase in provincial policy flexibility will be that great. The three provinces that do collect their own corporation income tax find it necessary to closely parallel the federal tax base in most regards. Therefore it appears certain that in considering the corporate tax policy alternatives available to the New Brunswick Government, the constraints imposed by the Tax Collection Agreement must be taken as given although there may be scope for the seven provinces to negotiate some sort of increased flexibility collectively.

In addition to the corporation income tax, several provinces levy a corporate capital tax. Essentially this is an additional form of property tax that is levied on the paid up capital of a resident corporation. The paid up capital is generally taken to be the capital stock plus reserves and surplus plus loans and advances although a simpler base is used for banks, loan and trust companies in Ontario and Quebec. Only such financial firms are subject to the capital tax in British Columbia, Newfoundland, Nova Scotia, and New Brunswick.

An important feature of the capital tax is that it is deductible from the corporation income tax. Thus in a very real sense it diverts corporation income tax revenues from the federal government to the levying province and the burden on the corporation is less than the revenues collected through the capital tax. Provincial capital tax rates have risen steadily in the last few years and it is unlikely that this diversion of revenues has gone unnoticed by the Department of Finance in Ottawa.

3. The Direction of Corporate Tax Reform in North America

Capital is highly mobile between the U.S. and Canada so it is not surprising that recent reforms in the U.S. tax are of great interest in Canada. As it happens, the direction of tax reform as revealed in actual legislation in the U.S. and by legislation and proposals put forth in the 1985 Department of Finance discussion paper in Canada is similar in both countries. In the U.S., corporate tax reform has taken the form of broadening the tax base and lowering corporate tax rates from 46 to 34 percent. The base has been broadened primarily by removing the investment tax credit and by substantially beefing up the role of the minimum corporate tax (a tax that does not exist in Canada). Significant, for Canada, it severely tightens up the foreign tax credit by limiting the corporation's ability to aggregate foreign profits across sources. The R&D tax credit is extended for three years but at a reduced rate and the qualifying criteria tightened. Some business expenses are made partially deductible only. The effect of these changes is to increase corporate tax revenues by over 120 billion dollars in 1986 and 1987. This large increase in corporate tax revenue is used to reduce overall personal income tax rates. It should be noted that the U.S. corporate tax system is "classical" in that there is no divided tax credit or other means of relieving the double taxation of dividends.

The proposals contained in the May 1985 Federal Budget in Canada and the accompanying discussion paper titled The Corporate Income Tax System: A Direction for Reform predated the U.S. reforms yet are remarkably consistent with them. The proposals in the Budget Paper are 1) the removal of the investment tax credit except for that on R&D, 2) the elimination of the 3 percent inventory allowance, 3) a significant reduction in accelerated depreciation with an upper limit on the capital cost allowance of 25 per cent and 4) a reduction in the standard federal rate from 36 to 29 per cent, 30 to 23

per cent for manufacturing and processing and 15 to 11 per cent for small businesses. Proposals 1) and 2) have already been enacted. Clearly, the thrust of corporate tax reform in Canada, as revealed in these proposals, is toward broadening the corporate tax base and lowering the rate. Yet the Canadian reforms were designed to be revenue neutral at the corporate level rather than revenue enhancing as in the United States. Moreover, the Canadian reforms propose the virtual elimination of accelerated depreciation, a provision which was left largely untouched in the United States.

Since the Canadian proposals were made, the U.S. reforms in personal and corporate income taxation have been enacted. These reforms include significant reductions in the marginal personal tax rates at all income levels with, as stated, the revenue loss made up from corporation income taxes. The Canadian Federal Government believes that such reductions demand some sort of response in Canadian personal income tax rates, a belief shared by many taxpayers. The problem is that neither the personal or corporation income tax bases in Canada provide the scope for base broadening that existed in the United States. It is speculated that such revenues may be obtained, at least in part, by some form of a national sales tax. It should also be expected, however, that the Federal Government will try hard to make corporate tax reforms revenue enhancing although it will be difficult to do this in light of the fact that the significant reductions in the U.S. corporate tax rates have made similar rate reductions in Canada all the more urgent.

It should be mentioned that many economists and businessmen are concerned that the U.S. tax reforms and those envisioned for Canada will severely discourage capital formation for some time. This is because the effective tax rate on new capital has been raised significantly by the reforms despite the reduction in corporate tax rates. The reduction in tax rates benefits "old capital" which is already in place whereas the removal of the investment tax

credit and, to some extent, the removal of accelerated depreciation, benefits mostly new capital. From the point of view of Ontario, where growth rates have recently been high and unemployment rates have recently been low, this relative discouragement of capital formation may be acceptable. However, we have emphasized, particularly in Chapter IV, that New Brunswick is in a situation of high unemployment where capital formation is essential. While the federal reforms may be acceptable for other regions in Canada, their impact in this respect must be offset in New Brunswick.

4. Corporate Tax Policy for Growth, Employment and Equity

The corporate sector includes a very large part of the productive activities in the economy so it is not surprising that corporate tax policy has been considered important for encouraging growth and employment. The role of the corporate tax in the pursuit of equity is less clear since the fact of the matter is that there is still very little known about the incidence of the corporation income tax. Everything economic theory has to say about this question does suggest that a corporate tax imposed by a small open economy (such as New Brunswick, or, for that matter, Canada) alone is unlikely to be borne by equity capital owners since such capital is highly mobile geographically and across national borders. As a result, when "the smoke clears" so to speak, increments in corporate tax rates in a province above those prevailing elsewhere are likely to be borne by owners of geographically immobile factors of production like land and existing improvements, or by geographically immobile consumers such as the elderly. Corporation income tax revenues that are generated at tax rates that do not exceed those set elsewhere, however, can be expected to be borne mostly by the shareholders of the corporation, since there is no more advantageous location to which the capital can be shifted. Thus many economists believe that there are few reasons for expecting that higher than

average corporate tax rates in a single province would advance the equity goals in that province, while lower than average rates would mostly benefit capital owners and thereby reduce the level of vertical equity. For this reason, this section will focus mainly on the goals of growth and employment although the equity considerations do enter as a constraint when revenues must be raised from other tax sources to finance tax incentives at the corporate level.

Concerning growth and employment, there are two main philosophies regarding the use of the tax system in general and the corporate income tax system in particular for pursuing these goals. The first view is that the tax system should be used directly to encourage and stimulate selected activities with targeted tax reductions, credits, exemptions and tax holidays. The second is that the tax system should be designed so as to provide a stable and neutral environment that does not interfere with the allocation of resources as determined by market profitability. The federal corporate tax system is consistent with neither philosophy from a purist viewpoint. It does contain, as mentioned above, certain provisions which seek to encourage a certain broad range of activities but, at the same time, it would be fair to say that it has not been loaded up with a lot of selective provisions. Moreover, the thrust of corporate tax reform at the present time has been toward the second philosophy. An avowed purpose of the corporate tax reform proposals put forth by the Department of Finance in 1985 is to reduce the variance in effective tax rates across different activities and different types of capital and to increase the importance of market profitability, as opposed to tax considerations, in determining output and investment.

Even if one adopts the neutrality philosophy, certain types of tax incentives can be entertained. In an economy with poorly functioning labour and capital markets, certain tax incentives may be corrective and can increase economic efficiency in the allocation of resources. For example, in view of the

structurally high unemployment rate in New Brunswick and other Atlantic Provinces, policies that encourage and increase job formation are highly desirable. Jobs are created by individuals and corporations who raise capital, bear risk and undertake ventures with the prospect of a profitable reward. Tax incentives can be provided through lower corporate tax rates, tax credits for employment and/or investment, and increased deductions and allowances. Lower rates increase the after tax reward while credits and deductions reduce the costs of entrepreneurial endeavours. Corporate tax policy is, of course, but one policy that may be used to increase the supply of jobs through encouraging entrepreneurship. A difficult problem with tax incentives is that the tax revenues which are lost must, in light of the binding government budget constraints, be made up by taxes elsewhere. Furthermore, lower rates and credits subsidize activities that would have been done anyway as well as the activities newly encouraged. For the former there are tax revenue losses but no benefit. For this reason incremental credits and allowances are sometimes used such as the employment tax credit introduced by the Federal Government in 1978 and the incremental R&D allowance that existed prior to 1983. Such incentives only apply to new employment or investment so revenues are not lost on expenditures that would have been made anyway. The main problem with incremental incentives is that they complicate compliance and are difficult to enforce. Further, they may actually discourage an activity because they reduce future incentives.¹

¹For example, the R&D allowance was based on increments above past levels of R&D spending by the firm. A firm which is currently spending less than past amounts but expects to spend more in the future is discouraged from spending more currently since it raises the base for calculating the increment. This would reduce future allowances without any current benefit.

In fact it is an incremental aspect that makes investment tax credits preferable to reduced corporate tax rates and increased depreciation rates as a means of encouraging investment in the eyes of many policy makers. The latter incentives apply to both old and new capital and therefore involve a greater revenue loss for a given level of incentive than do investment tax credits which only apply to new capital. Unfortunately, investment tax credits encourage short-lived investments relative to long-lived investments which may not be desirable.

Incentives for both employment and for capital formation often are advocated as job creation policies. In fact, at given levels of production, investment incentives may encourage the substitution of capital for labour and thereby discourage employment, particularly if the capital producing industries are not located within the domestic economy. However, it is widely believed that the long-run impact of capital incentives is to create jobs by reducing costs and making labour more productive. This requires that output grow as a result of capital formation and in the process, create jobs. By this argument, investment incentives for job creation would be most effective for industries where the output elasticity of employment is high.²

Some economists have argued that employment incentives are more effective at job creation than investment incentives. It is probably the case that, in terms of short-run impact, this is correct. The difficulty with employment incentives are two fold. First, in the absence of a workable means of making them incremental they have a high revenue cost because wages constitute such a

²The output elasticity of employment refers to the percentage increase in employment for a given percentage increase in output. As a first approximation this might be measured by labour's share in value added. Thus, investment incentives create the most employment when given to industries with high labour shares in value-added.

large part of value added. Second, they encourage employment at the expense of growth since they provide a disincentive for labour-saving investment. The end product of employment subsidies is more likely to be the creation of lower wage jobs and a stagnant technology.

The Federal Government and all provinces levy a lower corporate tax rate on small Canadian corporations. Also, special incentives have been provided by some provinces including the two-year tax holiday for new small businesses enacted in Ontario and the zero rate for small businesses in New Brunswick in 1984. Between January 1, 1986 and December 31, 1988, New Brunswick has implemented a special credit that effectively reduces the small business tax rate. For corporations with less than \$110,000 in active business income, the tax credit is equal to 44 percent of New Brunswick's corporate tax otherwise payable at the small business rate to a maximum of \$3,960 per year. This effectively reduces the rate to about 5 percent.

A standard argument for the preferential taxation of small businesses is that such businesses create a significant fraction of the new jobs in the labour market. This observation should be tempered by the knowledge that the turnover rate of employees of small businesses is much higher so they also are disproportionate in the creation of displaced employees. A more theoretical argument for the preferential taxation of small business is that capital markets are highly imperfect so small businesses have difficulty raising capital for what turns out to be profitable ventures. To the extent that tax incentives allow such ventures to proceed, both the tax base and employment are increased. A difficulty with this justification is that the tax preferences actually in place may do little to help the cash flow of small businesses. For example, since small businesses are very reliant on loan financing (the interest rate on which is deductible), the advantage of a low or zero rate on revenues is largely offset by the fact that interest costs are also deducted at this low rate. For

this reason it has been argued that small business would be helped more by allowing it to immediately expense its capital expenditures, at least up to some limit, with a refundable tax on losses created. This would, in effect, engage the government in the partial financing of small business.

Another concern is that very low small business tax rates may allow tax avoidance on personal income by channeling it through a small business corporation. It is important for revenue reasons that this be prevented by integrating the income of small corporate businesses with that of its owners. Further, the lower rate does not distinguish between income which is reinvested and that which is taken out of the firm. Thus the same preference is given to the firm whether it is investing and creating new employment (which is what the government seeks to encourage) or not. These arguments also suggest favouring small businesses in the form of generous deductions (such as immediate expensing of capital) or investment tax credits is preferable to reduced rates from a policy standpoint.

Obviously it also would be very desirable to attract larger firms and new industries, particularly those that generate a lot of employment, to New Brunswick. The main strategy for this is to provide a generally hospitable environment for business and industry and advertise that fact. This requires attention to more than just the tax system and encompasses labour and output market policies as well. The main thing that can be done on the corporate tax side is to avoid raising the provincial rate to a level which would brand New Brunswick as a high corporate tax province. Certainly it would be undesirable for corporate tax rates in New Brunswick to exceed those in the major industrial provinces like Ontario (15.5%). Likewise, there would be no advantage in lowering the basic rate below the 10 percentage point abatement allowed by the federal government.

There are numerous arguments for special tax preferences for R&D spending by firms. The usual argument is that such spending has major beneficial spillover effects on other firms and there is considerable evidence that this is in fact the case. Also, it is hoped that incentives to R&D spending will attract high employment and clean industry into the province. Two cautions must be stated. First, from a provincial viewpoint, the spillover argument only justifies provincial incentives to the extent that those spillovers are concentrated in the province. Second, tax incentives to R&D are widespread and it is unreasonable to expect that the province of New Brunswick can win a bidding war with the richer provinces in attracting "high-tech" industry by favourable tax treatment. This is not to say that there is no scope for provincial incentives in this regard. However, provincial incentives should be provided only for R&D spending carried out within the province of New Brunswick. Moreover, qualifying expenditures should be those which are more of the application type rather than the discovery type. These are more likely to provide immediate advantages within the province.

Before considering some specific corporate tax reforms for New Brunswick, a few comments must be made about the choice between incentives offered through the tax system to firms versus grants to firms. Any tax incentive can be duplicated by government to firm grants since the tax revenues could first be collected and then distributed as grants. There are two possible advantages to doing this. First, the use of grants allows greater discretion on the part of government as to which firms receive the incentives and the purposes for which the funds are put. Second, the grant could be used to achieve exactly the same result as a tax incentive when the tax incentive is not possible. This may occur in the provincial context if the Federal government were to reject the tax incentive proposed by the province. According to experience in many jurisdictions, the main disadvantages of the use of grants is that they are

costly to administer particularly if they are to be made very selective, they may be distributed to achieve political ends rather than economic, and they divert the energies of firms away from productive activities to "grantmanship". For general incentives such as those proposed in this document, the tax system appears to be the most cost effective way of delivering the incentive. Grants could be used, however, if the proposed incentives did not obtain Federal approval. In this case, it is recommended that the grants be used to duplicate the tax reforms outlined in the recommendations.

5. Specific Corporate Tax Reform Options for New Brunswick

In this section, certain tax reform options that have been proposed for the province are analyzed in the context of the above discussion.

A. Reducing the provincial rate from 15 to 14 per cent.

The advantage of this reform is that the favourable rate may attract new industry to New Brunswick and also "signal" that the province is a good place to invest. The disadvantage is that it can be expected to reduce revenues by about 4 million dollars per annum which, in view of the current provincial deficit, must be made up elsewhere. Further, as mentioned earlier, reductions in corporate tax rates reduce taxes largely on capital that is already in place. In short it is not a cost effective way of encouraging new investment and employment. Moreover, the existing New Brunswick rate is competitive with that of Ontario, Quebec and its Maritime neighbours.

B. Levying a Corporate Capital Tax

The corporate capital tax is a tax which, in the context of the Canadian economy as a whole, is probably a bad tax yet is advantageous to the individual province since it diverts tax revenue from the federal government and therefore raises more revenue than the burden placed on the corporation. Until or if it is no longer deductible from the corporation income tax it is an inexpensive

source of revenue for the province. Its main disadvantage from a provincial point of view is that it must be administered by the province and also imposes compliance costs on the corporations. In addition it may impose a competitive disadvantage on the province in attracting industry if its neighbours do not levy such a tax. The compliance disadvantage can be mitigated by exempting small business corporations or by levying a flat tax on them. Also, the corporate capital tax may be a good source of revenue to finance investment or employment incentives.

C. The Capital Tax as a Replacement for the Corporation Income Tax in Order to Provide a More Stable Revenue Flow.

It has been suggested that because of the volatility of corporate income it would be advantageous to reduce the New Brunswick rate to the basic abatement rate of 10 per cent and make up the difference with a corporate capital tax. It is likely that the increased stability of the corporate capital tax is largely illusory. It is difficult to expect corporations to pay large amounts of tax when they are losing money, say in a recession. In fact, under the Ontario capital tax, special relief has had to be offered to corporations in loss positions.

D. Tax Credits for New Investments.

There is now considerable evidence that suggests that such tax incentives are successful in increasing capital formation and employment although the amount of investment created may be less than the tax revenues lost. There is a strong case for using a generous tax credit, perhaps refundable, for investment by small businesses instead of a preferential tax rate. The tax credit can be used to improve the cash flow of small businesses while the disadvantages of the higher rate are not as severe on small businesses as might be expected because interest on the firm's debt and the depreciation allowance are deducted at a higher rate. A tax credit is used rather than immediate expensing or a 150%

allowance because it can be administered within the Tax Collection Agreement.

E. Tax Credits and Exemptions for R&D.

There is some case for a provincial credit for R&D spending undertaken within the province especially directed towards applications that would have an immediate commercial impact within the province. However, it is likely that the R&D tax credit will survive corporate tax reform at the federal level whereas tax incentives for conventional investment will not. For this reason it may be desirable to focus what little revenue room there is for tax incentives at the provincial level on conventional capital incentives. Furthermore, R&D incentives are plagued with the problem of the redefinition of expenditures as R&D, solely to get the tax advantage. This implies a revenue loss without any benefits unless the province has the resources to carefully monitor such redefinition.

F. Treatment of Credit Unions and Caisses Populaires Under the Income Tax Act

Section 125 of the Federal Income Tax Act establishes eligibility for the New Brunswick small business corporate rate as well as the federal lower rate. Credit unions and caisses populaires are eligible for New Brunswick's small business rate as long as they meet the conditions spelled out in Section 125. As far as the federal low rate is concerned, they are also eligible under section 137 of the federal act, where they qualify regardless of size.

Several provinces have followed the federal example, and extended the low provincial rate to all credit unions and caisses populaires regardless of size. The government of New Brunswick has been approached to amend provincial legislation to this end.

If members of credit unions or caisses populaires are viewed as individual business people united under a common umbrella, then one might argue they should not be taxed as a single entity, but rather as a collection of individuals. With this view in mind it does not make sense to apply the rules of section 125

to credit unions and caisses populaires. We recommend, therefore, that New Brunswick extend its 9 percent small business corporate rate to credit unions and caisses populaires, regardless of size.

G. Employment Credits for New Businesses.

We recommend new employment credits since they are likely to create some employment demand. We warn that these are difficult to administer, and that they do not directly encourage capital formation which is important for generating longer term employment.

H. Mineral Exploration Tax Credit.

Exploration is already favourably taxed under the existing tax system and it is not clear that any case whatsoever exists for enriching this treatment. Moreover, encouraging mining does not seem likely to increase growth, employment or equity in the province in comparison with the other uses to which the revenues could be put.

I. Nonresident Corporations.

It has been suggested that the Province should make a special effort to encourage nonresident corporations to use provincial institutions and services. We believe that the general thrust of our recommendations, which emphasize incentives for growth, adjustment, knowledge-based industries, and research and development, will achieve this goal. We do not recommend additional specific tax measures in this regard.

6. Recommendations

1) It is recommended that the provincial corporation income tax rate remain at 15 per cent. Furthermore, in response to forthcoming tax reforms, the Province of New Brunswick should adjust its rate, as needed, to remain

competitive with Ontario and neighbouring provinces. The justification for this recommendation is that reducing the provincial corporate rate is not likely to be a cost effective way of encouraging enterprise unless the existing provincial rate is out of line with those of other provinces.

2) It is recommended that an investment tax credit of a stipulated percentage of investment be instituted for small businesses for investments that result in increased employment. If necessary for revenue reasons, the reduced small business rate could be eliminated at the same time. Investment subject to the credit would not be eligible for depreciation deductions. The Province should give serious consideration to making this credit refundable to firms with insufficient tax liabilities. The justification for this reform is that the reduced rate applies to the income of small business regardless of whether they are reinvesting. This reform focuses the tax advantage on those small businesses that are investing which is the primary reason for the tax preference. A tax credit rather than immediate expensing is proposed because of the constraints of the Tax Collection Agreement.

3) It is recommended that a corporate capital tax be imposed which exempts small businesses. The revenues from this corporate capital tax can be viewed as necessary to finance a provincial investment tax credit or, alternatively, to offset the revenue losses associated with removing sales tax from producer inputs recommended in Chapter IX. This recommendation is made on the assumption that the deductibility of provincial capital taxes survives federal corporate tax reform. The justification for this recommendation is that, with deductibility, the capital tax is only partly paid by the corporations so the burden is considerably less than the revenues collected. Moreover, it provides a self-financing reform which encourages new capital formation and increased employment.

Chapter VIII

ENTREPRENEURSHIP, EDUCATION AND THE SMALL BUSINESS SECTOR1. Introduction

This section offers a range of ideas, in the context of tax reform, to spur the development of entrepreneurship and the growth of small business. These ideas are not advanced as a "solution", but rather as issues deserving consideration. As indicated many times in this report, it is important to emphasize that economic growth to create jobs and to overcome regional disparities is an extremely complex subject which cannot be dealt with by tax reform alone.

2. The Role of Corporations in the Educational Process

The rapid and continual changes in job content that are inherent in our new technological era mean that society must rely on corporations to retrain and upgrade our labour force. Formal educational institutions are simply not able to fulfill this responsibility. Within corporations, this emphasizes the need for attention to retraining programs as a major responsibility of management. Improving the effectiveness of retraining processes may be a central determinant of future corporate profitability.

For society, the traditional practise of channelling public funds into formal education institutions must be supplemented with assistance for corporate educational programs. In recent years, a variety of funding practises have been directed toward this objective. It is now important that these be evaluated on an ongoing basis. Since this public funding of on-the-job training is relatively new for Canada, it is likely that improvements can be developed over time. Particular practises and their modification should be regarded as experimental and their continual review should be seen as essential.

From a business perspective, a 1983 IBM report has emphasized the enormity of the requisite retraining necessary as part of technological progress:

The education and training of young people entering the work force, and the retraining and placement of displaced workers will be the major challenges of the next decade.

Estimates indicate that more than 20 percent, and possibly 40 - 50 percent of the work force will be displaced by the early 1990s and need retraining for new jobs. The people leaving schools today are not educated and trained for the job requirements of the '80s and '90s.

The lack of training will impact unemployment in two ways. First, the shortage of trained people will slow the introduction of new technology, and this will impair the efficiency and competitiveness of companies. This will result in slower recovery and growth. Secondly, the displaced worker will remain unemployed until he can be retrained.

Jim Davies and Glenn MacDonald have examined the use of public funds for on-the-job training in their 1984 book, Information in the Labour Market: Job-Worker Matching and its Implications for Education in Ontario. In this book, the authors have emphasized the needs of young people. We can be quite sure that, initially, all young people will require substantial on-the-job training, and this will make corporations reluctant to hire them. New tax credits to corporations are justified in the interests of achieving this practical education.

3. The University-Corporate Nexus

Much of today's economic progress has originated in the research of universities. Microelectronics and computers, biotechnology and genetic engineering, fibre optics, lasers and telecommunications are all being built upon the discoveries of university professors as well as upon research done within corporations. Modern advances in medicine and health care have also depended on university research. Agricultural productivity has increased as a result of new seeds, chemical fertilizers and new concepts of livestock breeding

that have originated in university research.

Canada's 1984 Task Force on Federal Policies and Programs for Technology Development emphasized the importance of these university-business research linkages:

If university laboratories were ever "ivory towers", they are emphatically less so today. Universities now play a central and strategic role in Canada's overall research effort. They tend to take the longer view; although most university research is fundamental, and is concerned with the earlier stages of the innovation chain, it is a crucial link in that chain. Fundamental research carries an additional benefit: it fosters the education process itself. The social benefits of education - which produces ideas as well as highly-skilled people - plus the long-term benefits of scientific research, make university research extremely cost-effective.

Industry is increasingly recognizing the need to involve the universities in the longer-term aspects of technological development, particularly through research and engineering which is the main conduit between the two sectors. But this dialogue is only just beginning. In the U.S., engineering institutions such as MIT, Stanford and Carnegie-Mellon have become key elements in the maintenance of America's industrial competitiveness. Both industry and government in the U.S. seem more keenly aware of the potential for close cooperation with universities. American universities, in turn, are better equipped to respond to these new industrial demands, in part due to extensive equipment donations by industry. These are due to the more generous tax treatment for such donations in the United States. We believe it would assist universities if similar provisions were available in Canada. (Task Force on Federal Policies and Programs for Technology Development)

It is important to emphasize that it is not solely the research of physical and biological sciences and engineering that underlies our economic progress. University research in the social sciences and humanities is also contributing to our society's economic activities. Improvements in business practices have benefitted from the research of professors in the many fields that explore the various aspects of human behaviour. Knowledge of people and their diverse needs underlies successful marketing and hence our competitiveness. It also underlies successful labour relations and personnel management. Implementation of new technology depends upon the skills and knowledge of our business executives. Understanding foreign legal systems and modifying our own laws can influence our international competitiveness. In these times of rapid change, analyzing the

many social forces impinging on our lives is essential to our ability to cope as a society and as individuals. Rapid shifts in our population's age structure, for example, impact nearly all government social programs as well as affecting the consumer demand for the various types of privately produced goods and services. Mathematics, computer software, and statistical analysis have become an intimate part of most of these research areas.

There are several reasons why the research in New Brunswick universities should include those subject areas that are most likely to lead to New Brunswick commercial applications. First, New Brunswick corporations doing applied research will find it helpful if they can look to New Brunswick universities for the basic principles upon which their innovations can be based. It is true that New Brunswick corporations could look to universities in other jurisdictions. But the technical transfer of knowledge will be more likely if it occurs between New Brunswick universities and New Brunswick corporations. Furthermore, in those subject areas where New Brunswick universities can be world leaders in basic research, New Brunswick corporations can have a strong competitive advantage.

Second, there can be a creative synergism between the university professors who are concentrating on basic research and the corporations which are attempting to apply that research. Both can acquire useful insights as a result of interrelationships. In the advancement of knowledge, there is more than a technical transfer of information. The process of communication can be creative. Ensuring that New Brunswick universities are involved in subjects of relevance to New Brunswick corporations can benefit the people who are involved at both of these levels.

Third, a corporation wishing to conduct its own applied research must be able to hire personnel who have been trained in research skills. It is largely to New Brunswick universities that our New Brunswick corporations must look for

the new employees who can work successfully in the development and implementation of new production processes and new management and marketing techniques.

Research within universities is intimately linked with the universities' teaching responsibilities. Research is an important determinant of the quality of instruction. Students can only acquire the ability to conduct research in their future professions by participating in research projects while they are in university. Furthermore, the most talented professors will leave New Brunswick and migrate to those countries or jurisdictions which provide them with more funds to pursue their research. The universities' abilities to convey the most recent advances in knowledge - particularly at the level of graduate studies - depend upon their research facilities and their professors' talents.

The Corporate-Higher Education Forum has enumerated a variety of corporate-university relationships that it considers useful:

- * University-based Interface Institutes: Centres specializing in a particular discipline, usually located on a university campus. These institutes can be owned by the university, or they can operate as semi-autonomous or independent organizations. They provide a facility where research that is beneficial to university and industry can be undertaken. Typically, the centres also provide training and consulting advice to local industry.
- * Joint Ventures: Corporate-academic collaboration governed by a specific, detailed contractual agreement and characterized by joint planning, management and implementation of a significant, long-term program of mutual interest and benefit. A questionnaire sent to 56 universities in Canada in October 1983, for purposes of this study, identified 37 joint ventures.
- * Contract Research: An agreement to conduct research providing corporate financial support for the investigator working in a particular field

under specific stipulations and conditions as specified in the contract.

- * University-Based Research Park: Centres that facilitate collaboration between the university and industry.
- * University-Based Companies: Companies that develop from the research and development activities of faculty at Canadian universities.
- * Co-operative Education: A form of education which alternates academic terms on campus with terms of related experience in a working environment. Over 20 Canadian universities and several colleges offer co-op programs to over 20,000 students in a growing number of disciplines.
- * Continuing Education: Education programs dedicated to utilizing university research to provide education opportunities for employed and unemployed including in-service professional training.
- * Manpower Transfer Programs: Programs administered by industry that encourage employees to attend universities for a limited time period and other programs available to university faculty that encourage sabbaticals with industry.

4. Small Business and Cash Flow Problems

The small business sector experiences two major cash flow problems. First, it is difficult for a new enterprise to acquire the capital needed for start-up. This is particularly true for firms in New Brunswick where capital markets are not as fully developed as elsewhere in Canada and North America generally. Second, small firms often lack profits against which to write-off depreciation on capital assets. It is desirable to have a high rate of births of new businesses. Not all will succeed, but to ensure dynamism in industrial structures and to lay the base for potentially larger firms that will provide future growth and development in New Brunswick, it is important that this source of new firms be facilitated.

In New Brunswick as elsewhere, the small-to-medium sized business sector is often identified as being especially deserving and most in need of assistance through tax expenditures or direct financial assistance. Small business is often seen as a primary engine for growth in the economy, wherein independent entrepreneurs are given credit for both innovative enterprise and significant job creation. To be more precise however, new and innovative firms are generally small because they are new, whereas it is not necessarily the case that "small equals new and innovative." Some small firms may be declining firms and thus may well deserve to stay small. Consistent with modified government intervention to correct market inefficiencies, most tax-based incentive schemes focus on the financing difficulties of small, growing business.

The most cited reason for government assistance to small and growing business is the need to offset market distortions and biases in the tax system that systematically prevail against investment in such firms. For example, private-sector financial institutions tend to attach a higher risk premium to small business than is warranted from the social perspective. Private financial risks are generally higher than social risks. Private sector preferences prevail in markets. Such market failures yield socially undesirable results if not offset by tax expenditure programs that reduce the private cost of capital and increase the availability of finance for private investment. In Volume I, we have discussed this rationale for special tax concessions in considerable detail. We repeat the following excerpt from Chapter III of that volume.

Many reform advocates seek to encourage the development of new small business. Indeed, many people believe that new small business ventures provide a society with special economic benefits. Some point to evidence that job creation occurs to a greater degree in new small businesses rather than in the expansion of the older, larger firms in traditional industries. Some point to

evidence that innovation also occurs to a greater degree in small businesses. From this perspective, it may not be enough to have tax changes that increase aggregate saving or even tax changes that are targeted at New Brunswick investment. Rather, it is necessary to aim special tax concessions at small businesses.

There is some consensus that shortcomings or "failures" in capital markets make it difficult for small businesses to acquire financing on the terms and conditions that would be socially optimal. Professors Boadway and Bruce have presented the following brief discussion of the capital market for small business.

Three sorts of finance are available to firms - debt, retained earnings, and new equity. Small businesses rely relatively more on debt and retained earnings than do other firms. Furthermore, a relatively large proportion of small-business debt takes the form of bank loans, rather than debt instruments sold on the open market. This pattern exists for two reasons. First, small businesses do not have the access to organized equity and bond markets that large public firms have because people in the financial markets simply do not find it worthwhile to devote many resources to small-scale operations. Thus, external financing is generally more difficult for small firms to obtain and may be more expensive due to the risk and lack of information involved. Much of the external financing they do obtain comes from bank loans; these are often given on a discretionary basis and cannot, therefore, be viewed as traded securities.

The other force at work in the financing of small corporations - one that may account for their unexpectedly large amount of debt - is a strong disincentive to finance by retained earnings that the tax law imposed until the November 1981 budget was brought down. Paying out of dividends reduced the firm's cumulative deduction account and thereby extended eligibility for the small-business corporate tax rate. Therefore, many firms avoided the retention of earnings, especially if their cumulative deduction accounts were near the upper limit for the small business tax credit.

The upshot of these effects is that small businesses rely more on bank loans and on the retained earnings of their owners than larger firms do. The markets for both sorts of finance are segmented or non-existent. There is an element of discretion in the terms available on bank loans. The shares of small corporations are not traded on organized markets, and retained earnings are very much the funds of the individual proprietors or shareholders (Boadway and Bruce, 1984).

Neave (1984) also analyzed these issues and concluded that,

[in] a fragmented financial market, the significant effect of a PIT is

likely to be an impairment in investment in small, closely held businesses financed by owners and their close associates. For in a fragmented financial market - and we have argued that informational asymmetries do fragment this market - much of the financing available to small business of all types comes from owners; few if any substitutes are likely to be found.

These analyses suggest that tax concessions that increase the availability of small business capital and decrease its costs may be highly desirable.

5. Inflation and Corporate Taxes

Taxes are paid on reported profits that are determined by using the accounting principle of historical cost. This overstates profits and profits taxes when there is inflation and even long after the inflation has abated because of the long life of capital assets. And this cost is usually unrecognized because very few companies use inflation-adjusted accounting procedures either internally or for external reporting purposes.

Profits are overstated in a period of inflation because the appropriations of cash for the replacement of assets through depreciation charges against profits are usually based on historical costs and, as a result, are not sufficient for replacing them later when there is a higher level of prices. Depreciation charges based on historical-cost accounting procedures will not appropriate enough cash within the firm to replace its assets at their new, higher prices when they have reached the end of their useful lives. Not only might the incorrect overstatement of profits lead firms to pay out dividends that should be retained for asset replacement purposes, but they may also unwittingly pay out their capital, thinking it to be a payment of income. And understated appropriations for depreciation could also lead firms into setting prices that are too low to cover all their costs in the longer-run. Eliminating the bias created in corporate decision-making by inflation through appropriate tax measures would help to ensure the survival of firms in New Brunswick. This is an important consideration at this point when the federal government may soon

do away with accelerated depreciation provisions of the income tax act which now offset the impact of inflation on corporate finances as discussed above.

Some recognition also needs to be given to the discriminatory treatment of equity relative to debt capital. This is particularly important to smaller, incorporated businesses in New Brunswick who have to rely on internally generated funds for expansion rather than the use of debt because of the lack of well-developed capital markets in the Province for this sector of the business community. Currently, there is double taxation of dividends on equity investment while interest costs on debt are fully tax deductible. The deductibility of dividend costs would help to eliminate this discriminatory tax treatment that is based solely on how a business has to fund its operations and not on any real distinction in itself in the types of capital used.

6. Flexible Market Structures

New Brunswick has ice-free, year-round port facilities with good air and rail access to the rest of Canada and many industrial parks adjacent to the ports. These are suitable for the development of free trade zones, an innovation to create more flexible markets that has moved ahead rapidly in the rest of the world but been completely undeveloped in Canada. Approximately one-fifth of world trade now moves through such zones.

One of the key concepts in a free trade zone is that tariffs and excise taxes do not have to be paid until goods are actually moved out of the zone and into Canada. No tariffs need to be paid on goods processed and then reexported, thereby saving considerable work on duty drawback applications. In addition, customs paperwork and other reporting requirements are streamlined and do not have to be prepared until the goods move out of the zone and into Canada. From a Provincial perspective, trade diversion is minimized and trade creation enhanced because the zone would tend to attract new firms not already in the

Province. The zone need not be a separate physical location, but could be a plant or other area specifically designated for treatment as a zone.

The Portland, Oregon zone is a good example of this type of development and how the Province could benefit from such an innovation. In this particular case, an overseeing body has control over not only the zone in terms of administering Federal import regulations and providing warehouse and other facilities, but it also undertakes initiatives to create growth and manage transportation and other supportive services in the Portland region generally. Such zones in Canada would require the cooperation of the federal government, since regulations relating to tariffs and their payment have to be rationalized by it. A proposal for doing so was prepared by the federal government at the request of the B.C. government. New ways of fostering flexibility in market structures deserve consideration, and the concept of a free trade zone provides an example.

7. Summary of Tax Reform in a Growth Context

This chapter has pointed to the variety of policy measures that other jurisdictions are considering in order to stimulate entrepreneurship and small business. The policies are based on the premise that in a market society it is the business sector with its entrepreneurs that is the engine of growth, given existing levels of demand. A receptive regulatory and tax environment is necessary to allow this sector to be unhampered in its creation of growth and jobs.

New investment would help change the current dominance of seasonal industries with low potential for growth and put more emphasis on reallocating resources into a much more diverse array of industries with higher value added and earnings potential. Hopefully, among the firms attracted to the Province

would be some involved with the new information technologies. At the same time, the proposals would help to build a stronger (and hopefully more geographically focused) producers' services sector. A strong producers' services sector (including that available through university-business interaction) is a necessary condition for attracting high technology firms and achieving growth and development. The proposals would also help to upgrade and retrain the labour force, provide more flexibility in labour-management relations and improve the productivity of labour. This also is a prerequisite for economic growth and improvement to the tax bases.

8. Issues

This report focusses on the tax system and tax reform options. Chapter VIII has presented a variety of issues apart from the tax system that deserve consideration as elements that may also foster entrepreneurship and small business. We do not present these as recommendations, but rather as illustrations of the additional measures that New Brunswick could contemplate in its overall attempts to increase growth and job creation. These include, for example:

- * Assist in the formation of export trading houses for small businesses.
- * Assistance during their start-up period to new consultants setting up practice in the Province to provide producers' services to the business sector.
- * Working with the Federal government to get rationalized import procedures comparable to those in competing free trade zones around the world.

10. Recommendations

The bottom line is that tax reform in the Province must be related to having a competitive cost and tax structure within a regulatory framework that

facilitates entrepreneurship, economic activity and resource reallocation to higher uses. In the longer run this is the only way to achieve growth in income and tax bases that will lead to increased tax revenues, lower tax rates and financial stability for the Province. The introduction of new investment tax credits would be particularly helpful for small business. Some provision for making these refundable would assist the cash-flow of businesses in their early years. Lacking an income and a tax obligation against which they could apply investment tax credits, businesses in their early years need some provision for refundability if they are to be helped by the tax credits.

As emphasized both in this Chapter and in Chapter IV, these investment tax credits should be provided not only for investment in physical plant and equipment, but also for investment in human capital through education and retraining, and for investment in research to create improvements in production technologies.

Chapter IX

SALES TAX1. Introduction

Sales taxes are the most important source of tax revenue for the New Brunswick government. Based on 1987-88 budget estimates, the Social Services and Education Tax - the retail sales tax (RST) - is expected to yield about 32.5 percent of tax revenues. Adding excise taxes such as the gasoline and motive fuel tax and the tobacco tax to this estimate, increases this percentage to 43 percent. Other major tax revenue sources include the personal income tax (31.6 percent) and municipal and provincial property taxes (18 percent). Because of its relative importance as a source of revenue and its potential impact, the retail sales tax merits special consideration.

This chapter examines the New Brunswick retail sales tax in the context of the general principles of indirect taxation and also in comparison with RST systems in other provinces. The issues of particular interest are the relative importance of RST as a source of revenue, the rate level and the choice of exemptions and exclusions from the base.

An additional issue concerns the upcoming federal tax reform. The federal government has clearly indicated that the approach being considered revolves around the implementation of a national Business Transfer Tax (BTT), a form of value added tax (VAT) applicable on a broad range of goods and services as a replacement for the current manufacturers' sales tax (MST). The BTT is likely to generate much more revenue than the MST and may be used as a means of reducing the personal and corporate income tax rates. The implementation of a federal BTT will have significant implications for the provinces. The definition of a value-added tax base is essentially equivalent to that of the RST so that the federal government can be seen as moving into a tax field

previously occupied by the provinces. Also because current RST rates apply to the value of goods gross of MST, replacing the latter with a broader ranging BTT at a lower rate will immediately affect provincial sales tax revenues.

Moreover, the federal government has also indicated that in the process of implementing a BTT, provinces would have the option to extend federal provincial tax collection agreements to include the sales tax. Indications are that the BTT base would be much broader than current provincial RST bases and also that such a tax would be more effective in avoiding the tax cascading which occurs through the taxation of business inputs and capital goods. On the other hand, provinces who opt for a BTT tax sharing agreement with the federal government could lose considerable flexibility and control in determining the basic elements of a major source of revenue. Chapter III reviews some of the arguments for and against a BTT from the perspective of a province such as New Brunswick. However, the details of the federal proposals are not available yet and until they are it will remain difficult to assess the mechanics of a federal-provincial sales tax collection agreement and more importantly, the related costs and benefits.

The objective of this chapter is to describe the issues and reform options related to the system of indirect taxation currently in application in New Brunswick. The main focus is on the retail sales tax and the improvements that could be brought at that level. Also, the distinct issues concerning excise taxes (for example, taxes on gasoline and motor fuels, tobacco and alcoholic beverages) are addressed in the last section.

2. Principles of Indirect Taxation

The two fundamental principles of sales taxation are based on the assumption that a nation's resources will be allocated to their most optimal use if the market process is allowed to operate freely. For this to occur in the

presence of a sales tax, both production and consumption neutrality must be preserved.

The principle of production neutrality implies that a sales tax should not affect producers' behavior. This requires that all producer goods including raw materials, intermediate products and capital goods be exempt of tax when final products are taxable. The taxation of producer goods involves two related issues: tax cascading and resource misallocation. The impact of a turnover tax (a tax on all transactions), as an extreme case of producer goods taxation, can be used to illustrate the negative effects involved.

Taxing all transactions would be undesirable, however, because although there might be only one tax rate, it would be imposed again and again. There would be taxes on taxes, and as each good moved through successive stages of production and distribution, the taxes would accumulate; the more transactions there were to tax, the greater would be the increase in the final selling price. Consequently, the percentage by which the final price of a commodity would be increased by such a tax - the effective tax rate - would vary with the number of sales and purchases incurred in the production and distribution process. These cumulative effects are known as "cascading". We will not know how much the final price would be increased by the tax because we are never sure what proportion of a tax is actually shifted forward at each stage. But we do know that reducing the number of transactions would reduce the total tax payable and that a general turnover tax would set up an artificial incentive for firms to integrate and would penalize small firms and subcontracting. It would penalize investment too, because a firm buying capital equipment would have to pay the tax on these purchases. (Robinson, 1986, p. 40)

In addition, a turnover tax would discriminate against domestic manufacturing because imports of finished products would be subjected to fewer taxable stages. Exports would also be discouraged because it would be difficult to assess the value of taxes built into the final price of products for the purpose of remittance. Overall, these differential effects would result in resources being shifted from heavily to lightly taxed sectors mainly on the basis of industry structure rather than productivity which may not be compatible with economic efficiency.

Basically there are two methods available to avoid cascading of the sales tax. With the tax credit method, registered firms can credit the tax paid on

their purchases from registered suppliers against the tax payable on their own sales. With the suspension technique, registered firms can purchase tax-free from other firms, and the tax applies only on purchases by unregistered firms or consumers. Manufacturers' and wholesale sales taxes are single stage taxes that avoid tax cascading by using the suspension technique. However, it should be noted that these taxes, nevertheless, interfere with both production and consumption neutrality through their effects on distribution activities by inducing firms to push forward certain trading margins (e.g. insurance, transportation) to minimize taxable value.

A sales tax should also be neutral in its effect on consumer choice. This requires that all goods and services be taxed uniformly. Otherwise consumers will adjust their purchases substituting between untaxed or partially taxed items and fully taxed ones. This substitution will result in reduced demand for taxed items and a reduction in the factors of production used in the taxed industry. This could generate an inefficient allocation of resources and reduce economic efficiency. The loss in economic efficiency is referred to as the excess consumer burden. It means that consumers are not as well off as they would have been if the same amount of revenue had been raised by another tax that did not affect consumer behavior.

The loss of economic efficiency which results when the sales tax interferes with consumption and production behaviour imposes costs on the economy as a whole. These costs should not be underestimated. Recent research suggests that the costs of distortions caused by the tax system may be much larger than was previously thought. Efficiency is therefore a central issue in sales taxation.

Another issue concerns whether commodities are taxed on the basis of the location of consumption or on the basis of the place of production. The former are categorized as destination-based taxes and the latter as origin-based taxes. The destination principle is widely viewed as the preferable approach to

coordinating sales tax among jurisdictions. In principle, a sales tax should not affect decisions about manufacturing locations by distorting the relative costs of home-produced and foreign-made goods. In theory, it should not matter whether exports are exempt and imports taxed or vice versa because the exchange rates and/or domestic prices will adjust accordingly. However, in practise, exchange rates and prices are not perfectly flexible and a destination-based tax with imports taxed and exports exempt is seen as more neutral in its impact. A further advantage of such a tax is the ease of administration of border tax adjustments because taxable value is not an issue as it would be with an origin-based tax. Under a VAT, all prior stage tax is refunded in the case of exports. For imports, the value reported is not a concern as long as the goods are imported by registered firms. In the case of the RST, imports are taxed when purchased and exports are not taxed at least not explicitly.

3. Why Use Sales Taxes?

Sales taxes of either the single-stage or multi-stage variety constitute a significant portion of revenue for nearly all governments at both national and sub-national levels in most countries of the world. Sales tax are historically the oldest taxes, and are often thought of as the most secure revenue source. They are also often thought of as regressive, since high income households save more than low income households and savers are often viewed as not paying the tax. This is a misconception, however, since savers pay the tax when they dissave.

Sales taxes have no clear resource allocation rationale; they do not correct misallocations of resources elsewhere in the economy. They do, however, have the virtue of providing a secure revenue source. They also have the attraction of lower volatility in revenues over the business cycle than is true of, say, income taxes. Because the latter are progressive taxes, in a business

upturn revenues increase more proportionately than incomes. Equally in a downturn, income tax collections fall more proportionately than incomes. Under a sales tax, revenues generally rise or fall in proportion to incomes.

As was indicated in Volume I, the case for using a general sales tax is very much related to the type of direct tax in place. The most serious distortion attributed to the broad-based income tax is the fact that it favours current consumption over saving and future consumption. Restricting the use of the PIT by relying on a general sales tax has the advantage of limiting the severity of this distortion. It has been argued that such an approach may also reduce the work disincentive effects of the PIT. However this would require that a tax illusion take place such that the taxpayer would not perceive that the reduced tax burden on the income side is compensated for on the expenditure side. Perhaps the more important arguments in favour of using the sales tax relate to the fact that tax avoidance and evasion are more prevalent in the case of PIT and the fact that broad-based indirect taxes are efficient revenue raisers. There is also the widely held belief that a combination of direct and indirect taxes may provide governments greater scope to implement various economic objectives while minimizing specific tax-induced distortions and collecting necessary revenues.

4. Retail Sales Tax Reform Issues

Although the retail sales tax can in principle be neutral in its effects on producers' and consumers' choices, this form of taxation as generally applied involves significant non-neutralities which generate economic distortions. Three elements of the system are at issue: 1) the numerous and sizable exemptions to the tax; 2) the exclusion of many services from the tax base and 3) the fact that a substantial proportion of intermediary inputs and capital goods are taxed.

Exemptions. In principle the retail sales tax should "apply to all purchases of tangible personal property at a retail sale" (Robinson, 1986, p. 56). However, in practice all governments that use the RST as a source of revenue also implement a long list of tax exemptions. For the most part these exemptions can be classified in three categories: a) those aimed at alleviating the tax burden on low income taxpayers; b) those to prevent the taxation of producer goods and; c) those to prevent the double taxation of items already subject to another form of sales taxation. Provinces have in general granted many more RST exemptions than is the case for state sales taxes in the United States. In fact, exemptions reduce the sales tax base by almost 50 percent in some provinces. The significance of RST exemptions is a result of a number of factors. First, the RST has much greater visibility as compared to other forms of sales taxes which are not quoted separately and this increases taxpayers' awareness of the tax. Also, indications are that as a rule "exemptions breed more exemptions". Once exemptions have been granted, it becomes politically difficult to withdraw these and it signals the potential for further preferential treatment. Finally because the RST is a tax on consumption its burden is perceived, in an annual context, to fall more heavily on low income taxpayers who consume a relatively larger fraction of their income. Many of the exemptions commonly used seek to exempt from tax certain items which are considered necessities and make up a larger proportion of expenditures of low income families as compared with those that are better off. This is seen as improving the fairness of the tax and therefore its acceptability.

However, with the exception of exemptions on producer goods, the case for limiting exemptions to an absolute minimum is very strong. First, there is the issue of neutrality. Exemptions imply tax discrimination in favour of the non-taxed goods and industry as well as the consumers of the nontaxed good. As a result, resources can be misallocated at a cost for the economy as a whole. The

fact that each additional exemption reduces revenues substantially and usually results in a much higher tax rate being required to yield the necessary revenues further exacerbates the tax-induced distortions. Exemptions also create additional administrative complexity and scope for tax evasion and misapplication. Moreover, there is even some question as to whether certain exemptions actually accomplish their stated objectives.

Exemptions on food, clothing, footwear, prescription drugs and utilities aim to alleviate the burden of sales tax on low income individuals by eliminating the tax on these items viewed as "meritorious". However, there are several reasons to question this approach. First the exemptions are implemented at a great cost both in terms of tax revenue foregone and additional administrative complexity, and they reduce neutrality. For instance, the food exemption in New Brunswick is worth \$85.3 million in revenues forgone, almost 20 percent of the value of RST collection for 1985-86. Second, although some of these exemptions make the retail sales tax less regressive, it remains that they are provided to all taxpayers regardless of income. Also, in many cases the food, clothing, and footwear exemptions extend to all items including luxury ones. It has often been argued that a more efficient way to alleviate the tax burden on low income individuals is through a system of personal income tax credits specifically aimed at these individuals. Several authors have also questioned the effect of the clothing and footwear exemption (See Davies (1985), Feehan (1985) and Schrank and Feehan (1984)). It appears that such an exemption may in fact increase the regressivity of sales taxes because these expenditures make up larger percentages of the budgets of the rich than the poor.

Finally, it is often argued that the apparent regressivity of sales taxes in an annual context may simply be a reflection of lifecycle and transitory income effects. This is explained by the fact that low income groups will consist for most part of young and elderly individuals and the temporarily

unemployed whose consumption will on average be greater than their incomes while high-income groups include a disproportionate number of middle-aged individuals with high savings rates. Viewed in a lifetime perspective the pattern of sales tax burden is actually more or less proportional to income. It should be noted, however, that the lifecycle incidence argument does not apply to the segment of the population who are apt to remain in the low income group regardless of age due to lack of opportunity or some other reason. Recent studies also suggest that even in an annual context the incidence of sales and excise taxes can be shown to be progressive or regressive depending on the assumptions that are made regarding the shifting of the tax. This ambiguity about the incidence of the retail sales tax has led several authors to question the suitability of the RST as an instrument for the pursuit of equity.

A further type of exemption is that which aims to prevent the double taxation of certain items. The gasoline and motive fuel exemption provided in most provinces is a case in point. Although avoiding the double taxation of articles subject to excises seems sound in principle some questions have been raised about this type of policy. It can be argued that the retail sales tax should be extended to gasoline and motive fuels to facilitate administration and improve the neutrality of the RST. The excise tax on these fuels is seen as serving an entirely different purpose as a form of benefits tax that is related to road use to help finance highway expenditures.

The taxation of producer goods. A recent study by Kuo et al (1985) reveals that only two-thirds of provincial sales tax (64 percent) apply to purchases of final products by households. The remaining tax strikes business acquisition of capital goods (8 percent) and business purchases of intermediate inputs (28 percent). As already explained, this results in a tax cascading effect since taxes paid on business inputs are not relieved at later stages in the production chain. This cascading has the effect of producing higher taxes

on multiple, more complex production processes, and also has the effect of discouraging exports. The estimates produced by Kuo et al, indicate that in general provincial RSTs may be highly non-neutral with respect to production and consumption choices and also that these taxes apply only partly on a destination-basis since some of tax built into production costs will filter down to export prices. Any move to redress some of these tax induced distortions particularly by eliminating the taxation of production goods and services would greatly improve the efficiency of the retail sales tax and reduce its costs.

The issues and problems related to the taxation of producers' goods have been recognized for quite some time.

In general, the exemption of physical ingredients and parts from retail sales is a simple, administratively feasible and highly effective way of excluding from the taxes a substantial number of goods purchased for business use. But it by no means solves completely the problem of producers' goods. Under the usual definition of retail sales, purchases by business firms of fuel, industrial machinery, supplies, lubricants, motor vehicles, building materials, office equipment and the like; purchases by farmers of machinery, equipment and supplies; and purchases by merchants of fixtures and other goods not for resale are subject to tax unless specific exemptions are provided. (Due, 1964, p. 52)

The estimates produced by Kuo et. al., indicate that the taxation of producers goods does remain a problem. Part of the reason relates to the classification difficulties in assigning either an intermediate or final consumption purpose to certain goods. The other problem is the potential tax revenue loss from excluding all intermediate goods from the tax base. John Due's (1964) earlier study of the provincial sales taxes proposed a general approach which still applies.

As reconsideration is given to the tax structures, it is highly desirable that the principle be kept in mind that application of the tax to those elements entering in the cost of production and distribution as well as to the final products themselves is objectionable and should be minimized to the extent that exemption is administratively feasible. (Due, 1964, p. 64)

In practice, however it is not feasible to exclude from the tax many articles used by business firms, since such purchases cannot effectively be eliminated from the tax when similar items are frequently purchased for

non-business use. Therefore, the exclusion of producers goods must be confined to a few major categories.

- a) Materials and parts becoming physical ingredients of other goods. These are now universally exempt.
- b) Consumables, goods consumed in the manufacturing process, and exempt under the federal sales tax. This is a broader concept than the catalyst category now exempt in several provinces.
- c) Industrial machinery and equipment, exempt under the federal sales tax prior to 1963. This class represents a major item of business expense, and tax on it will deter business investment.
- d) Fuel and power for industrial use.
- e) Railroad rolling stock.
- f) Farm feed, seed, fertilizer, plants and trees, and livestock, the farm equivalent of materials and consumables.
- g) Farm machinery and equipment, but not tools and other small items, the exemption of which cannot be effectively controlled. Certainly the exemption of these items while other producers' goods are taxed is not entirely equitable. But it is far better to exempt the major categories than none at all. (Due, 1964, p. 195).

Exclusion of Services. As Robinson (1986) points out the early legislation in Canada relating to RST considered the tax as primarily a levy on the retail selling price of tangible property. As a result the taxation of services has until recently been avoided. However as Due's (1964) study of the provincial retail sales tax suggested there is no rationale for excluding all services from the base since these provide utility to consumers in the same way as physical goods do. This position was later supported by three official provincial inquiries. In essence the exclusion of services affects the neutrality of the RST in much the same fashion as exemptions do and consequently involve the same sorts of distortions.

The question of taxation of services has received much more attention in recent years with the increased awareness of the growth of the service sector and the fact that the income elasticity of demand for services tends to be high. Services are seen as gaining much more importance in the economy and the

preferential tax treatment of this sector together with the potential tax revenue source it offers have become more of an issue.

However, there are a number of factors to be considered in regard to the taxation of services. First there is the fact that much of the growth in services has occurred in the service categories that are not necessarily amenable to retail sales taxation. The largest growth has been in services to producers, in mixed services (where distinction between consumer and producer transactions is difficult to make) and in social services like education, health care and public administration. As Robinson (1986) concludes the services that fall within the realm of taxation comprise only a small portion of the service sector.

Nevertheless, in principle, retail sales taxation should cover consumer services rendered by commercial establishments. According to Due (1964), it is better not to include personal services rendered by individuals because of the administrative problems that would result and as a matter of social policy, hospital, medical, dental and similar services should not be taxed. Some of the items to be included in the base would include: transient lodging; repair, cleaning, painting, etc. of taxable tangible property; installation, repair and cleaning of items designated as fixtures; laundry and dry-cleaning; servicing of motor vehicles; printing; admissions and barber and beauty parlor work.

5. The New Brunswick Retail Sales Tax

In evaluating New Brunswick's tax mix it is important to consider that the province derives a substantial portion of its revenues from federal government transfers in comparison to other provinces. Because of this, a more accurate indicator of relative tax effort consists of tax revenues as a percentage of own-source revenue. For the fiscal year 1985-86 such figures indicate that while New Brunswick derives a somewhat lower proportion of own-source revenue

from the PIT as compared to other provinces (25.9 percent versus a national provincial average of 27 percent), the share of own-source revenues accounted by the New Brunswick retail sales tax (30.7 percent) is considerably larger than the average for all provinces (16.7 percent).

As Table II.9 demonstrates, the RST rate of 11 percent for New Brunswick is the second highest across provinces. Newfoundland has the highest rate at 12 percent. On the other hand, Alberta does not collect any RST and the Prairie provinces rates are about half that of New Brunswick. New Brunswick's relatively high RST rate may therefore be viewed with some concern because of possible work disincentive effects and the impact on labour mobility not to mention the fact that higher rates in general exacerbate the distortionary effects of the tax.

New Brunswick also has the second highest provincial PIT rate (excluding Quebec). However, the province has a relatively small base due to economic and demographic factors and this is reflected in the fact that PIT revenue still represent a smaller proportion of revenues than in most other provinces. It is also important to point out that although New Brunswick relies to a greater extent on the RST as a source of revenue, the province does not make use of a number of taxes which are implemented in other provinces. These are the paid-up capital taxes levied on non-financial corporations in a number of provinces; the payroll taxes applicable in Quebec and Manitoba and the Hospital and Health Insurance Premiums collected in Ontario, Alberta and British Columbia.

Although the New Brunswick sales tax rate is the second highest in Canada, the RST is subject to numerous exemptions under provincial legislation. Estimates produced for the 1985-86 fiscal year indicate that these exemptions reduce the value of the sales tax base by about 46 percent. By eliminating all these exemptions, the provincial government could maintain its revenues intact while reducing the RST rate from 11 to 6 percent. Table IX.1 lists the various

Table IX.1

Estimated Value of Sales Tax Exemptions, 1985-86

(\$millions)

<u>Household Sector</u>		<u>Value</u>
1.	Food For Home Consumption (Groceries)	85.3
2.	Water, Fuel and Electricity	33.5
3.	Fertilizer, Lime and Shrubs	0.9
4.	Gasoline and Motive Fuel	31.0
5.	Prescription Drugs	7.1
6.	Clothing	28.1
7.	Footwear	6.9
8.	Tobacco	13.0
9.	Prepared Meals	1.0
10.	Funeral Caskets	1.2
11.	Status Indians Exemption	0.9
12.	Textbooks and Classroom Supplies	1.7
13.	Magazines, Periodicals and Newspapers	2.0
14.	Paperback and Hard Cover Books	1.4
15.	Miscellaneous (Wood Stoves, Second Hand Mobile Homes, Settlers Effects, etc.)	2.0
16.	Repair to Housing	2.1
Total: Household Sector		<u>218.1</u>
<u>Non-Household Sector</u>		
1.	Farm Machinery and Equipment	6.2
2.	Fishing Machinery and Equipment	1.3
3.	Mining Machinery and Equipment	7.8
4.	Logging Machinery and Equipment	0.2
5.	Manufacturing Machinery and Equipment	19.5
6.	Clay, Sand and Gravel	1.7
7.	Fertilizer and Feed	5.4
8.	Equipment Used in Telephone Service:	
	- Central Office Equipment	2.8
	- Station Equipment	0.4
9.	Equipment Used in the Generation of Electricity	3.7
10.	Fuel and Electricity	76.1
11.	Production Materials for Use in the Manufacture of Printed Matter	0.5
12.	Service Component:	
	- Repairs to Exempt Machinery and Equipment	12.1
13.	Miscellaneous (Explosives Used in Mining, Export Products, Etc.)	0.6
TOTAL: Non-Household Sector		<u>143.8</u>
TOTAL VALUE OF EXEMPTIONS		<u>361.9</u>
Estimated Sales Tax Revenue		<u>439.8</u>

Source: New Brunswick Department of Finance.

Table IX.2

Interprovincial Comparison of Sales Tax Exemptions¹

	N.B.	N.F.L.D.	P.E.I.	N.S.	QUE.	ONT. ²	MAN.	SASK.	B.C.
Commodity Class	11%	12%	10%	10%	9%	7%	6%	5%	7%
Food (Home Consumption)	E	E	E	E	E	E	E	E	E
Prescription Drugs	E	E	E	E	E	E	E	E	E
Electricity	E	T(3)	E	T	T(4)	E	T(5)	T(6)	T(7)
Firewood	E	T	E	E	E	E	E	E	E
Water (Health Purposes)	E	E	E	E	E	E	E	E	E
Classroom Supplies	E	T	E	E	E	E	E	E	E
Restaurant Meals	E	T	E	E	E	E	E	E	E
	\$1.00		\$2.00	\$4.00	\$3.25	\$1.00	\$6.00		\$6.99
	or less		or less	or less	or less	or less	or less		or less
Footwear	E	E	E	E	E	E	E	E	E
		Children(9)		\$150	\$125	\$30	Children	Children	Children
				or less	or less	or less			
Clothing	E	E	E	E	E	E	E	E	E
		Children(10)		\$300	\$500	Children	Children	Children(12)	Children
				or less	or less	or less	or less		
Farming Equipment	E	E	E	E	E	E	E	E	E
Fishing Equipment	E	E	E	E	E	E	E	E	E
Production Machinery	E	E	E	E(8)	E	E	T	T	E
Goods Purchased for Production by a Utility	E	T	T	E	E	T	T	T	T
Clay, Sand & Gravel	E	T	E	E	T	E	E	E	E
Telephone Equipment	E	T	T	T	E	E	E	T	T
Thermal Insulation	T	E	E	E	T	T	E	T	E
Books	E	E	E	E	E	E	E	E	E
Drycleaning	T	T	T	E	E	E	T	E	E
Biologicals and Medicaments	E	E	E	E	E	E	E	E	E
Second Hand Mobile Homes	E	T	E	E	T	E	T	E	E
Liquor	T	T	T	T	T(13)	T	T	T	T
Railway Rolling Stock	T	T	T	T	T	T	T	T	T
Plants, Shrubs & Trees (other than food sources)	E	T	E	E	T	T	T	E	T
Goods purchased by Indians	E	E	E	E	E	E	E	E	T

(continued)

Table IX.2Footnotes

E - Exempt
T - Taxable
n/a - Not Applicable

¹Alberta has no sales tax.

²Exempts large trucks/trailers.

³Exempts for domestic and manufacturing uses only.

⁴Exempts for manufacturing up to 90 percent of quantity purchased.

⁵Exempts for domestic heating only, cooking and lighting are taxable.

⁶Exempts for domestic and commercial heating and manufacturing uses.

⁷Exempt for domestic purposes only; includes heating, lighting and cooking.

⁸Not exempt if equipment is used in production/processing of non-renewable resources (4% rate applies).

⁹Adult footwear exempt per item up to \$125.00 for areas along Quebec, Newfoundland border.

¹⁰Adult clothing exempt per item up to \$500.00 for areas along Quebec, Newfoundland border.

¹¹Used adult footwear valued at \$20.00 or less.

¹²Used adult clothing valued at \$100.00 or less.

¹³10% rate applies.

NOTE: Comparison based on New Brunswick's exemption structure. Additional exemptions may apply in other provinces.

exemptions from the RST base and their estimated value for 1985-86. The major ones include food, utilities, gasoline and motive fuel, and clothing. While the gasoline and motive fuel exemption is justified in order to avoid double taxation, the other major exemptions are rationalized as equity improving. It should be pointed out that in addition to legislated exemptions the RST system in New Brunswick as well as elsewhere also involves de facto exemptions, that is, items that are not automatically taxable, even though they are not designated as exempt under tax law.

Table IX.2 provides an interprovincial comparison of sales tax exemptions across provinces. This table indicates that New Brunswick is relatively generous in providing exemptions from the retail sales tax particularly with respect to electricity, clothing and footwear. Items such as food, prescription drugs and medical appliances, most books and children's clothing are exempt in all provinces. Goods taxed under excises are exempt in all provinces except Newfoundland and Ontario where tobacco products are subject to both taxes. This is also the case for alcoholic beverages in Prince Edward Island. Many provinces exempt thermal insulation materials and energy conservation devices. Adult clothing and footwear only receive complete exemptions in Prince Edward Island and New Brunswick. Other provinces like Nova Scotia and Quebec provide limited exemptions while the remaining provinces offer no exemption at all.

The exemptions for producer goods also show some variation between provinces. Even though exemptions for production machinery, production consumables and processing materials are becoming the norm there remains inconsistencies. All provinces exempt farm machinery and equipment; farm products, seeds, and crops, farm livestock and feed; and fertilizers insecticides, etc. as well as commercial fishing gear and equipment. Production machinery is exempted fully in Newfoundland, Prince Edward Island, New Brunswick, Quebec and Ontario. Other provinces provide more limited

exemption for specified machinery and equipment. Production consumables are exempt in Newfoundland, Quebec, Ontario, Saskatchewan, and British Columbia but only receive limited exemptions in New Brunswick and Manitoba. Processing materials are exempt in all provinces except New Brunswick. As in the other provinces building materials are taxed in New Brunswick. Although the New Brunswick government has been relatively generous in granting RST exemptions in the context of improving equity, it can also be said that the province has been less diligent in excluding producer goods from the tax base.

There has been a trend across provinces in recent years toward base broadening of the RST to include more services. There is much variation across provinces in this respect. As was pointed out by Robinson (1986) the principle of taxing services has become well established in Canada. However, its occurrence is still not as common here as it is in the United States. Service categories such as telecommunications, transient accommodation, some repairs to tangible personal property, are currently taxed in most provinces. Gas and electricity, dry-cleaning, printing, advertising and leases of taxable goods are also taxed in some provinces. It should be pointed out that some of these items are taxed under separate legislation in certain provinces, for example, insurance premiums, admissions and gas are taxed in New Brunswick but not under the retail sales tax. The taxation of services in the United States (particularly in Hawaii, South Dakota and New Mexico) covers a broader range of items including travel tickets, installation of appliances and equipment, private club fees, and some professional services (e.g., architects, accountants, barbers and beauticians).

7. Retail Sales Tax: Directions for Reform

The previous sections have reviewed the basic principles of indirect taxation and the major reform issues related to the retail sales tax. We have also provided a fairly detailed description of the New Brunswick RST system in particular, with respect to current exemptions and exclusions from the tax base and compared these with the situation in other provinces. On the basis of this information the broad direction for reform is fairly clear.

Evidence suggests that the retail sales tax is not the appropriate instrument to either implement equity objectives or to provide incentives for specific economic activities. The main advantage of the RST is its revenue raising capacity and the fact that it can be used to relieve pressure on other forms of taxation. In light of this, RST reform efforts should be focussed on the efficiency aspects of the tax. As a rule, the more neutral the tax is in its application, the more efficient it will be.

For New Brunswick, the emphasis should be on removing the imposition of the RST on producer goods to the extent that it is administratively feasible. Such practise results in tax cascading, higher export prices and the misallocation of resources in the production process which the government should seek to eliminate. As discussed earlier, New Brunswick is lagging behind other provinces in this respect in particular in providing only limited exemptions for production consumables and not exempting processing materials. Full exemptions should be granted for these items. The province may also want to investigate limited exemptions on building materials although in this case the issue of classification of use is very much a problem.

Another important objective of reform should be the broadening of the RST base and reducing the rate. The purpose here would be to improve the neutrality of the tax and reduce its efficiency costs. Another advantage of base

broadening is the reduction of administrative complexity. This would correspondingly allow for a lowering of the rate which would also temper the tax-induced distortion including the work disincentive effects and the encouragement of non-market activities.

In order to accomplish this the government must reassess all current exemptions to determine whether these fulfill their intended purpose; whether the benefits they provide warrant the associated costs in terms of additional administrative complexity and non neutrality; and whether tax exemption is in fact the most efficient way of accomplishing the task at hand.

- * Food, prescription drugs and utilities. These exemptions are almost universal. They lessen the burden of RST on low income taxpayers and improve the perceived fairness of the tax by exempting items considered necessities. However, these exemptions (food in particular) involve considerable reduction of the tax base and may be particularly inefficient because the exemptions apply to all taxpayers regardless of their ability to pay. The province should study the possibility of eliminating these exemptions and replacing these with a system of personal income tax credits specifically aimed at reducing the tax burden on low-income families. This measure would not only improve the efficiency of the RST, it would also make the overall tax system more progressive. Such a move would be made considerably easier if a number of provinces, if not all, developed a consensus in this respect.
- * Clothing and footwear. This exemption should be reconsidered. Indications are that this type of exemption does not reduce the regressivity of the RST. Again the equity objective is probably better served through PIT measures. One of the concerns for New Brunswick is the fact that both adjoining provinces provide children's clothing and footwear exemptions as well as limited exemptions on adult clothing and footwear. The possibility that removing this exemption may discriminate against local retailers. This issue should be investigated. Nevertheless, it remains that New Brunswick is far more generous than most other provinces in granting an unlimited exemption which is not warranted.
- * Books, newspapers, library purchases. These exemptions are seen as contributing to an informed and educated public. This objective would be better addressed through the subsidy system. The value of the exemptions is quite small and therefore not likely to have much of an impact. These should be removed to the extent that it is administratively feasible to broaden the base, reduce administrative complexity and improve the neutrality of the tax.

- * Gasoline and Motive Fuel. The rationale for this sizeable exemption is to avoid double taxation. However, there is a case for removing the exemption on gasoline and motive fuel for personal use to the extent that the excise tax on gasoline and motive fuel is a benefits tax related to highway usage and used to finance highway expenditures. Such a move would broaden the base considerably and reduce the efficiency costs of the tax. There are a number of problems with this approach however. First, because in spite of a number of recommendations in favour of this approach, all provinces continue to exempt gasoline and motive fuel. Second, the gasoline and motive fuel tax not only applies to purchases of gasoline for highway use but other uses as well. Third, the rate of excise taxation on fuel is considered to be already substantial. Finally, implementing an RST on motive fuel would require a system to prevent the tax from falling on producers.

Another way of broadening the New Brunswick retail sales tax base would be to tax more consumer services. New Brunswick has followed the trend present in most provinces toward including some services in the base. However, the province currently limits service taxation to categories commonly taxed in most other provinces. There are a number of other service items which could be brought into the base. For example, printing, photocopying and microfilming, advertising, private club fees and perhaps even some professional services offered by commercial establishments such as architects, accountants, barbers and beauticians.

In principle, purchases of services by consumers should be taxed at the same rate as purchases of tangible goods. The problem with many services is that it is sometimes difficult to distinguish between purchases for business purposes and those for personal use. On the other hand, the taxation of services would eliminate some of the administrative complexity associated with having to exclude from the tax base the service element in sales of tangible personal property requiring various forms of services (e.g., installation). One possible method of avoiding the taxation of producer services would be to allow all registered firms to make all purchases of services tax free and account themselves for the tax applicable on the portion of services used for private use.

8. Excise Taxes

The rationale for using excise taxes is very different than that for broad based sales taxes like the VAT and the RST. Excise taxes apply by definition to specific commodities, and in that sense, discriminate specifically against the taxed goods. However, there are a number of reasons to justify their use.

For instance such taxes can be used to improve the progressivity of the overall tax system by exploiting the differing elasticities of demand for various commodities. Taxes levied on the consumption of luxury items have traditionally been used for this purpose. Similarly, by exploiting the differing price elasticities of demand for various commodities, excise taxes can be used to collect revenues while minimizing efficiency costs. In other words, taxes on products for which the demand is not very sensitive to price increases are more efficient.

Also to the extent that a tax can be targeted on consumption directly related to benefits derived from specific public expenditures, the benefits principle of taxation may apply. Taxes on gasoline consumption are a good example. Such consumption can be seen as complementary to highway usage, therefore the more an individual taxpayer makes use of public roads, the more he contributes to the expenditures related to highway repair and construction through the gasoline tax. It should be pointed out here that provincial gasoline and motive fuel excise taxes do not strictly adhere to the benefits principle. The principle only applies in this case to the extent that the consumer of motive fuel pays higher taxes as a result of additional highway use. However, as Robinson (1986) points out, although the statistics indicate a high correlation between motive fuel taxes collected and provincial highway expenditures, for the past 30 years the latter have exceeded tax revenues to a significant degree. Moreover, for the portion of the excise tax which does not apply to fuel used for highway transportation the benefits argument is irrelevant.

The issue of production neutrality may apply here as well. Such a tax, if applied on highway usage for production purposes may discriminate against specific industries or activities and also result in tax cascading. However, it is generally argued that to the extent that the benefits principle of taxation applies, the excise tax on gasoline and motive fuel should extend to all highway users. In principle therefore, gasoline and motive fuel tax exemptions should be avoided where the consumption occurs on public highways.

Finally, excise taxes on products such as tobacco and alcohol are often justified because the consumption of these products is believed to generate costs for society as a whole. The externalities are costly both implicitly in terms of productivity loss and explicitly through the resulting increase in health care and crime prevention services required. Such taxes have been shown to be regressive however. The consumption of these commodities constitutes a larger share of the income of low income families as compared to that of higher income families.

A comparison of excise tax rates applicable in New Brunswick and in other provinces indicates that gasoline is taxed at a relatively lower rate in New Brunswick (7.7 cents per litre) as compared with most other provinces, particularly the adjoining provinces. The rate in Quebec is 13.65 cents per litre and that in Nova Scotia is 8.9 cents per litre. The rate differentials on diesel fuel are also similar. This would suggest that there is room to increase the rate of tax on gasoline and diesel fuel in New Brunswick. Also, the province should probably follow Manitoba and Ontario's lead and move back to a volume based tax as opposed to the ad valorem method of taxation. This method yields more stable revenues and is directly tied to highway usage.

In the case of tobacco, the rate in New Brunswick is the fourth highest in the country at 4.12 cents per cigarette. Newfoundland's tax is highest at 4.78 cents per cigarette, Quebec's rate is 4.52 cents per cigarette and the rate in

Nova Scotia is 4.50 cents per cigarette. The issue of whether New Brunswick should increase tobacco taxes is probably more a matter of social objectives and revenue requirements than economic judgement. The same argument can be made in the case of liquor taxes (both excises and profits from the sale of liquor).

9. Issues Referred to the Tax Review for Consideration

A. Sales tax on services to tangible personal property. In 1983, the Government of New Brunswick extended the retail sales tax to services to tangible personal property, a tax measure now generally referred to as "the labour tax." There has been widespread criticism of this measure since its introduction 4 years ago. In part, the criticism arises from the perception of the tax as a tax on labour and in part because it is seen as unfair.

As a general policy step the 1983 change was positive. It broadened the tax base and to some extent reduced economic distortions caused by differing tax treatment of different kinds of economic activity. This measure was not novel in Canada and most provinces that levy a sales tax apply it to services to tangible personal property.

There are aspects of the tax, however, that warrant change. There is no distinction in application of the tax between services to industry and services to individuals. Consequently, it has added to the undersirable tax cascading characteristics of the sales tax system noted above. In this case, tax cascading is even more serious because all firms are not affected equally. Those that carry out their service work "in house" do not pay the tax while those that contract out do. Often it is the small firm that has to pay the tax because the scale of its operation does not warrant developing the service capacity in-house.

These undesirable features of the tax could be overcome by exempting services to business from the tax. It is not practical for administrative

reasons to exempt all such services, however the major items that are clearly used commercially could be identified. Trucks would very likely be at the top of such a list.

B. Building Materials. The province of New Brunswick currently taxes building materials including those used in production. In principle, purchases of materials for production purposes should be tax exempt to avoid tax cascading. The problem with this particular item is the difficulty in distinguishing between intermediate and final use purchases. However, New Brunswick should explore the possibility of exempting specific building materials which are more likely to be used by businesses.

C. Tax Treatment of Tourism. A number of issues concerning the tourist industry have been referred to the tax review for comment. Several of the issues concern inputs to the tourism industry (such as the purchase of promotional materials, linens, and other products used in the delivery of tourist services). Our general view is that such inputs should not be subject to tax. We are compelled to add, however, that there are both financial and administrative concerns that also must be considered in this context.

A second major issue is the taxation of alcoholic beverages. These purchases by restaurants, lounges, and taverns are subject to a fee of 11 percent and the retail sale is subject to a tax of 11 percent. This double levy is considered by the industry as an impediment to its growth and development.

On this matter, we have two comments:

First, reducing the amount of revenue from the sale of alcoholic beverages does not seem logical given the generally high rates of tax prevailing elsewhere in the system. Consequently, doing away with the double levy would result in reducing the tax on consumption of alcoholic beverages in commercial establishments and raising the tax on consumption elsewhere.

Second, it is unlikely that this particular feature of the tax system has a significant impact on tourism.

In view of these considerations and the likelihood of a reduction in the sales tax to 10 percent, we recommend against removing the fee charged on sales of alcoholic beverages and commercial establishments.

D. Cross-border shopping. An additional issue concerning the retail sales tax and the gasoline tax is whether exemptions should be provided for border communities; the argument being that rate differentials may encourage residents to go shopping across the border. A look at actual rate differentials and recent evidence on cross border shopping between Ontario and Quebec indicate that this is not likely to be an issue of general concern and general exemptions are therefore not warranted. However, a specific issue may arise, such as the tax treatment of furniture, that will require a solution specific to that problem.

E. Diesel Fuel Consumed by Trucks. It was proposed by a truckers' organization that the tax on diesel fuel be reduced. In general we view such tax as a charge for using the Province's highway system, bearing in mind that transportation costs are important given the industrial and geographic make-up of the New Brunswick economy. It should be noted that diesel taxes are now significantly lower than when this issue was raised and we recommend against any further reduction diesel taxes.

F. Tax on Fuel Consumed by Municipal Vehicles. Municipal organizations have asked that the Government reconsider its decision to eliminate the exemption for municipal vehicles under the gasoline and motive fuel tax act. It is well

established practise in Canada that different levels of government pay each others' taxes. We would not re-institute the exemption.

10. Recommendations

New Brunswick should seek to improve the efficiency and neutrality of the RST by eliminating the taxation of producer goods to the extent that it is administratively and financially feasible. This would involve:

- removing the limit on the exemption for production consumables.
- providing full exemption of processing materials.
- exploring the possibility of providing exemptions to specific building materials more likely used by businesses.

It is also important to lower the current RST rate by a percentage point, or two, to bring it more in line with rates in other provinces, particularly adjoining ones and to reduce the distortionary effects of the tax.

Rate reduction would be facilitated by base broadening. The current RST base is subject to numerous legislated exemptions. The exemptions imply tax discrimination and reduce revenues as well as the neutrality of the tax. They usually result in higher tax rates being required. Exemptions also create additional administrative complexities and scope for tax evasion and misapplication. Moreover, exemptions provided as equity improving may be an inefficient and costly means of addressing such an objective.

New Brunswick is relatively generous in comparison with other provinces in providing exemptions. Each of these exemptions should be reassessed to determine: 1) whether it fulfills its intended purpose; 2) whether the benefits provided warrant the associated cost in terms of additional administrative complexity and economic distortion and 3) whether tax exemption is in fact the most efficient way of addressing the objectives involved.

Finally, as another means of broadening the base and making the RST more neutral, the province should consider bringing more consumer services into the base. These may include printing, photocopying, and microfilming, advertising, private club fees, and perhaps some professional services offered by commercial establishments such as architects, accountants, barbers and beauticians.

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Chapter X

PROPERTY TAX1. Introduction

The property tax differs significantly among Canada's provinces in several important respects. These differences make interprovincial comparisons difficult and limit the usefulness of generalizations about property taxes.

In most provinces, the property tax is levied by municipalities, with both rates and assessment procedures varying among municipalities. Hence it is not realistic to treat a province's property tax as a uniform structure against which to make interprovincial comparisons. Furthermore, the services provided by municipalities in return for the property tax vary among municipalities. A low property tax may simply reflect a minimal level of municipal services, accompanied by larger private sector expenditures to purchase these services privately. A high property tax may similarly reflect a high level of expenditure responsibilities borne by municipalities. Without examining the services provided at the municipal level, interprovincial comparisons of the property tax can be misleading for this reason as well.

In some provinces, municipalities have a relatively low property tax but also levy a business "occupancy tax." Without including such additional taxes and fees, a simple interjurisdictional comparison of property taxes may be misleading.

These features of municipal finance mean that property tax reform will not affect all municipalities equally. Furthermore, tax reform may impact provincial grants to municipalities. Apart from these complexities, there is an additional political perspective that has traditionally played an important role in affecting the rates and structure of the property tax. Many governments view home ownership as a basic social objective. Home ownership may foster desirable

values like hard work and personal saving; it may foster desirable behaviour patterns such as caring for one's community; and it may be seen as an important component of family life. Hence a property tax may be designed to assist home ownership quite apart from the rationale of economic efficiency or payment for benefits received.

Reform of the property tax must be considered in light of these special features.

2. The New Brunswick Property Tax

Many of the common criticisms of the property tax as a method of revenue collection do not apply to the system of property taxation currently in place in New Brunswick. The 1967 municipal tax reform, as part of the "equal opportunity reforms" discussed in Chapter II, brought significant changes which have greatly improved not only the property tax but also the system of provincial/municipal finance in New Brunswick. The major elements of this reform included:

- a) A fundamental re-alignment of financial responsibility with the provincial government having jurisdiction over all expenditures related to education, hospitals and public health, social welfare and administration of justice.
- b) The centralization of both assessment and collection functions at the provincial level.
- c) The establishment of equalization grants to municipalities for the provision of local services.
- d) The elimination of poll and personal property taxes.
- e) A uniform province-wide property tax equivalent to \$1.50 per \$100 of assessment on the full market value of all taxable real property including businesses to cover a portion of the standard program of education.
- f) The setting of the municipal rate on all business property in cities and towns to \$0.50 cents per \$100 of assessment of the market value of real property. The setting of provincial rates for local services levies elsewhere in the province to a maximum of \$0.50 cents per \$100 plus a levy of \$2.00 per \$100 of assessment on the occupiers of all business property.

Following these modifications, there were two further changes to the property tax which gave way to the system currently in place. The first consists of the homeowner tax credit which was phased in over the 1975-1978 period. This credit eliminated the provincial portion of the property tax on all owner-occupied residential properties in municipalities. This provincial portion had previously been set at \$1.50 per \$100 of assessment. The homeowner tax credit reduced the provincial property tax on owner-occupied residential properties located outside municipalities to an effective rate of \$0.40 per \$100 of assessment. This rate was increased to \$0.65 in January 1984. The second change resulted in the elimination, in 1982, of the business tax on occupiers. Since 1982, there has been a uniform provincial rate on nonresidential property equivalent to \$2.25 per \$100 of assessment value. This change resulted in a significant reduction in the property tax borne by many businesses.

Several of the characteristics of the New Brunswick system are already compatible with general recommendations made in studies on property tax reform. New Brunswick is therefore ahead of many provinces in regard to the following:

- 1) The fact that all property is assessed at its "real and true" value and that assessment takes place at least every five years greatly improves equity and reduces the market distortions associated with different types of property being assessed differently;
- 2) The fact that the province has undertaken both the assessment and collection functions contributes to the consistency, efficiency and simplicity of the property tax system;
- 3) The fact that responsibility for people-related activities has been shifted to the provincial level guarantees significantly more uniformity in the services provided and their availability.

Also, given that these activities are financed out of general revenues, the provision of these services will be related to ability to pay to the extent that the overall provincial tax system is progressive;

- 5) The elimination of the

business tax is considered an improvement because such a tax results in double taxation and a relatively higher tax burden for the business sector; 6) The fact that the New Brunswick property tax is not subject to several exemptions and exclusions from the tax base is also considered an advantage in that distortions are minimized. Schools, colleges, universities and public hospitals are fully assessed and taxed at the residential rate; 7) Although the province collects property taxes for the municipalities, local autonomy is preserved in setting rates. This approach is considered desirable to the extent that local rate differentials reflect differentials in services provided.

On the basis of these characteristics, the New Brunswick property tax system is substantially more compatible with the basic economic objectives of taxation than are the systems currently in place in most other provinces. However, there remain a number of areas where the tax could be greatly improved. An important issue in discussing the appropriate approach to reform is that of determining the purpose of property taxation in New Brunswick. If the tax were to be used to finance strictly property-related services, the tax could be redesigned as a benefits tax. Under these conditions, rates and revenues would be defined to closely reflect services received and the choice of equitable rates, credits and exemptions would no longer be an issue.

On the other hand, if the property tax is to continue as a general source of revenue, then ability to pay remains very much an issue since people-related services such as health, education and social services constitute well over 50 percent of the provincial budget. Related to this concern is the need to determine to what extent the province should rely on the property tax as compared to other taxes as a source of revenue. While the New Brunswick property tax has undergone several important modifications since the late 1960s, its share as a percentage of own source revenue has decreased from approximately 12 to 8 percent over the 1969-1986 period. At the same time, the share of own

source revenue accounted for by the personal income tax increased from about 16 to 26 percent while the share of the retail sales tax increased from 24 to 28 percent. Data on the property tax as a percentage of own source revenue (provincial and municipal) and as a percentage of personal income (see Table X.1) indicate that relatively smaller amounts of property tax are collected and paid in New Brunswick as compared to many other provinces. A more equitable and efficient property tax could potentially be used to a greater extent as a means of increasing revenues or alternatively to compensate for a reduction in other

Table X.1
Property Tax as a Percent of:

	Own Source Revenue				Personal Income			
	1979	1980	1981	1982	1979	1980	1981	1982
Newfoundland	1.8	1.9	1.9	2.0	0.4	0.4	0.4	0.4
Prince Edward Island	12.5	11.6	11.8	11.7	2.2	2.1	2.1	2.0
Nova Scotia	22.5	22.7	23.3	21.3	3.3	3.4	3.3	3.3
New Brunswick	17.0	16.5	16.3	16.7	2.8	2.8	2.8	2.8
Quebec								
Ontario	28.2	29.0	28.6	29.0	4.6	4.6	4.4	4.5
Manitoba	31.6	32.2	30.4	29.3	5.1	5.2	4.7	4.7
Saskatchewan	8.4	7.5	7.3	7.2	2.0	2.0	1.7	1.9
Alberta	—	9.3	9.9	10.1	—	3.7	3.6	3.8
British Columbia	19.1	20.0	18.2	21.1	3.9	3.7	3.6	3.8

taxes. However, even if property tax revenues were to remain constant it would still be worthwhile to implement changes which would improve some of the equity and efficiency aspects of the tax.

3. Property Tax as a Benefit Tax

A common argument in the literature on property taxation is that property-related services should be financed based on the benefits principle of taxation while people-related services should be financed based on ability to pay. Although there is some correlation between the value of residential property owned and ability to pay, it is generally agreed that comprehensive income is a better indicator for this purpose. Furthermore, there is no reason to believe that the value of property owned in business is related to ability to pay.

According to the benefits view of property taxation, such a levy should constitute a set of user charges for locally provided public goods and services. The level of property taxes paid should reflect the costs of providing services such as fire and police protection, sewer and water but not people-related services such as education and welfare. With the changes introduced in the Equal Opportunity Program of 1967, the provincial property tax clearly became a general revenue source, largely unrelated to benefits. At the municipal level, the property tax is based on the benefits principle. However, property taxes at the municipal level and associated issues of financing local government are beyond the scope of this study.

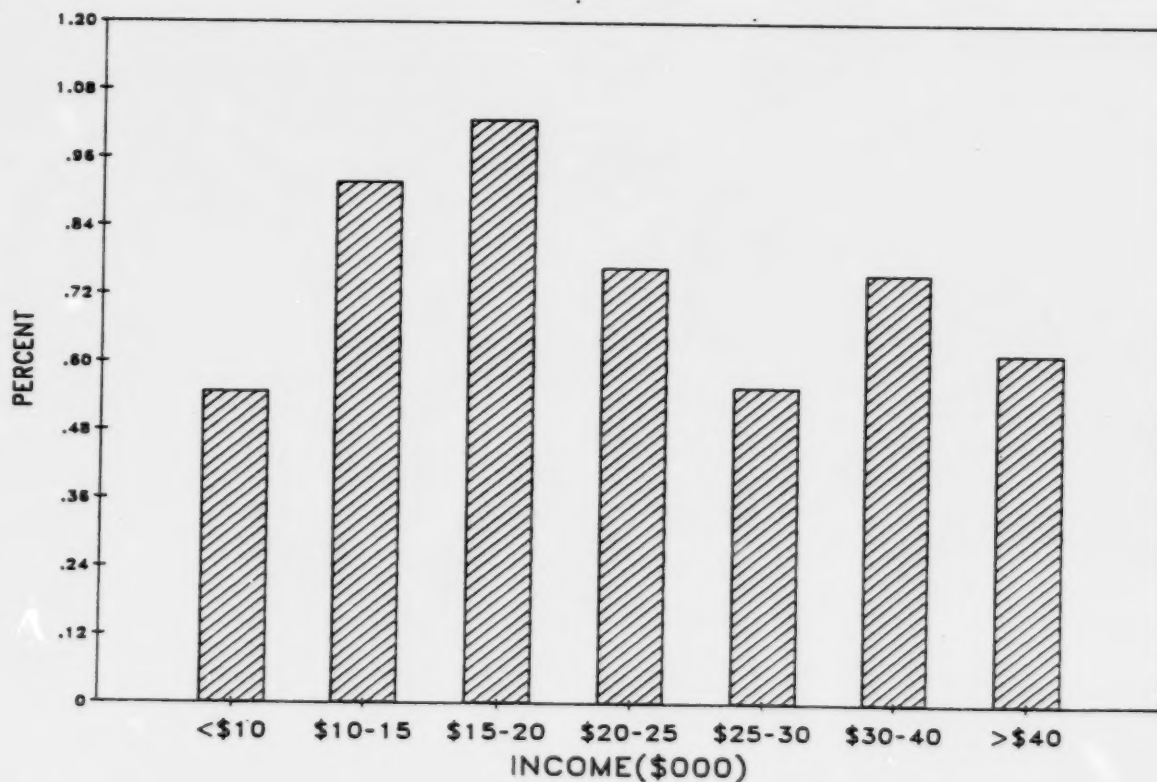
4. The Residential Property Tax as a General Revenue Source

If the New Brunswick property tax continues to be used as a general revenue source then there are a number of equity and efficiency issues which arise, mainly as a result of the current rate structure.

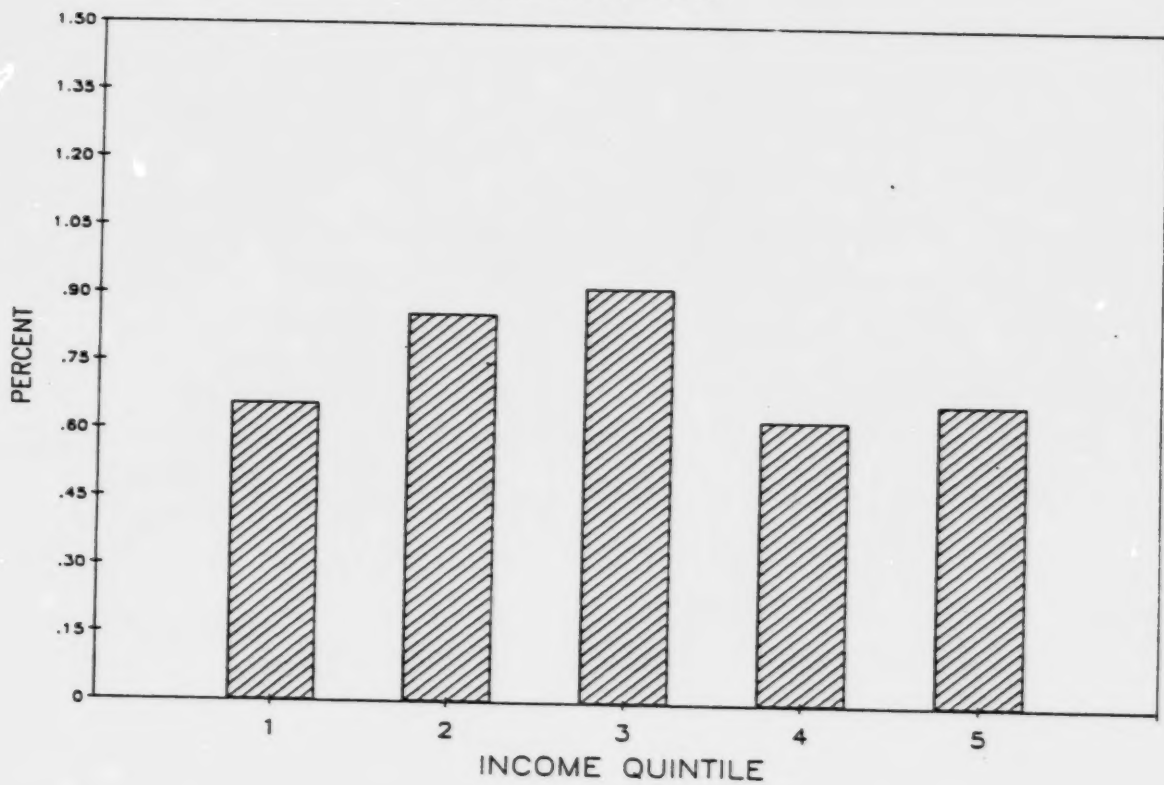
a) Vertical Equity

There remains considerable controversy as to the effective incidence of the property tax. Graphs 1 and 2 report property taxes paid as a percentage of income based on 1982 New Brunswick Family Expenditure Survey data. These graphs suggest that the tax burden is progressive up to the \$20,000 income range or the third income quintile, although the overall pattern is regressive. However, the ultimate incidence of the property tax is open to debate. Traditionally, this tax has been seen as regressive. This view is based on the assumption that the portion of tax which applies to structures is fully shifted forward from property owners to users of property or their customers.

GRAPH 1
TAX PAID AS A PERCENT OF INCOME
PROPERTY TAX
1982



GRAPH 2
TAX PAID AS A PERCENT OF
INCOME BY INCOME QUINTILE 1982
PROPERTY TAX



However, in recent years this view is increasingly being challenged. While there is general acceptance that the portion of the tax which applies to land is unshifted and borne by landowners, it is now considered that the portion of the tax accruing to structures also has the impact of a capital tax rather than an excise tax. In other words, much of the burden of the tax is believed to have remained on capital owners in the form of lower net rates of return on capital. The new view of the property tax suggests that landowners bear the burden of the tax on land while capital owners bear the burden of the property tax in proportion to the national average rate of tax. From a national point of view, the property tax is progressive. But it is the local perspective that is of interest. To the extent that New Brunswick's residential and/or nonresidential property tax rates are lower than the national average, indications are that the effective incidence of this tax is probably progressive or perhaps proportional over the higher income ranges. However, irrespective of whether one adopts the traditional or the new view of the property tax, its incidence is likely to be regressive over the lower income ranges. Evidence in this respect would warrant the use of credits or exemptions to alleviate the regressivity of the tax in the lower income groups.

b) The Residential Property Tax

A uniform rate of \$1.50 per \$100 of assessment value applies to all residential property in New Brunswick. However, the homeowner tax credit eliminates provincial property tax liability for homeowners within municipalities and substantially reduces the effective rate for homeowners outside municipalities. In fact, the homeowner tax credit is a major factor explaining the relatively lower burden of property tax in New Brunswick as opposed to other provinces. However, the credit generates significant horizontal equity problems and market distortions. The credit applies only to

owner-occupied dwellings and not other residential property which is subject to a full \$1.50 per \$100 of assessment rate of taxation. As a result, residential property owners with equal property values are taxed differently on the basis of owner occupancy. Also, the difference in effective tax rates between types of residential property may cause resources to be misallocated within the residential sector. Moreover, because the credit is available to all homeowners, it does nothing to alleviate the regressivity of the property tax.

There is no economic rationale for a universal homeowner tax credit either on equity or efficiency grounds. The point is that the same rate should apply across the board to all residential property, owner-occupied or not owner-occupied.

If this differential in effective residential rates were eliminated by removing, or reducing, the tax credit, the impact on the elderly and low-income people would have to be addressed. This could take the form of a property tax credit against the income tax or an assessment based credit. The former approach offers the clear advantage, from an equity perspective, of a direct link between the tax credit provided and income as an indicator of ability to pay. The advantages of an assessment-based credit relates to the fact that the credit program would be integrated as part of the property tax system and that the costs of the program would be more easily estimated.

However, we would suggest that a careful evaluation of the extent to which a credit based on assessed value can alleviate the regressivity of the property tax over the lower income groups. The credit program under either approach should be designed so as to impact as accurately as possible the families in these specific groups, with graduated credits that vanish at an appropriate income level.

5. The Nonresidential Property Tax

In New Brunswick, as in most other provinces, residential property bears a lower tax burden than nonresidential property. This is accomplished in New Brunswick by applying a differential rate on nonresidential property equivalent to 1.5 times that applicable to residential property. The same split ratio applies to municipal rates. This approach reflects the prevailing opinion that businesses should bear a heavier tax burden because of their greater ability-to-pay. However, as indicated above, this rationale is questionable. This approach also ignores the ability of businesses to shift the burden of taxes either forward onto consumers or backwards on labour in a pattern which may be regressive overall.

There is no economic criterion which can be used to justify higher effective property tax rates which generally apply to nonresidential property in Canada. In fact the opposite situation may be easier to justify. Furthermore, the application of split rates or occupancy taxes are inefficient in that they may induce the misallocation of resources (land and capital) among different uses. Estimates of effective tax rates on capital suggest that the nonresidential property tax is an important contributor to the variations in tax rates within both the manufacturing and nonmanufacturing sectors of the Canadian economy.

According to some experts, the efficiency costs associated with property taxation would be lowest if effective nonresidential property tax rates were lower than the residential rates. Indeed, some argue that a higher tax rate should apply to the less mobile factor, in this case owners of residential property.

Another important issue concerning the nonresidential property tax is that of tax exporting. Some commentators have found property tax exporting to be a significant occurrence among Canadian jurisdictions. Indications are that the

nonresidential property tax is, in many cases, shifted to consumers or owners of the factors of production residing outside the taxing jurisdictions. This can be done either through changes in the terms of trade or as a result of lower rents paid to nonresident capital owners. While tax exporting may be politically attractive, it can only be rationalized to the extent that local services enter the production process. This condition would only apply in certain cases and is unlikely to exist in the context of people-related services.

6. Property Taxes as a Determinant of Location Decisions

Two additional issues should be considered in evaluating the property tax. Some people see this tax as a mechanism for attracting investment to New Brunswick, and some see this tax as a mechanism for implementing municipal planning.

Presumably, by keeping New Brunswick property tax rates low, the province can encourage businesses to locate here. From this perspective, the important issue may be the extent of the differentials compared with taxes in other Canadian provinces. Our introduction to this chapter has indicated a number of reasons why such comparisons are imprecise. Nevertheless, Table X.1 suggests that New Brunswick property taxes are considerably lower than those found elsewhere. Hence current effective rates could be raised without making New Brunswick taxes non-competitive. In any case, there is not strong support in the literature to suggest that property taxes are a significant element in business investment decisions. Furthermore, low property taxes provide assistance to all businesses rather than just to new investment. From the perspective of stimulating new investment, incentives should be targetted more precisely than can be done with the property tax. Our recommendations in

earlier chapters for new investment tax credits or grants are preferable to reliance on the property tax for this purpose.

Similarly, zoning regulations provide a much more direct influence over location decisions than can property tax differentials. Planning the most desirable location patterns is particularly important in controlling decisions to locate outside of municipal boundaries. It is true that rate differentials between municipalities and their surrounding areas can affect location decisions. Reliance on such rate differentials to achieve a particular location pattern, however, is not as effective as zoning regulations which can be designed to achieve specific objectives.

7. Reform Options

In many respects the New Brunswick property tax system is already superior to that currently in place in several other provinces. Responsibility for people-related services has been shifted to the provincial level along with assessment and tax collection functions. All properties are fully assessed and erosion of the tax base is minimal. Municipalities can set their own property tax rates and all taxes are levied on property owners (there is no business tax). There are a number of reform options concerning the New Brunswick property tax system:

The areas for potential reform are related to the current rate structure rather than to the administration of the tax. In this regard, it should be determined to what extent the government will rely on the property tax as compared to other taxes as a source of revenue. Data indicate that the property tax is a relatively less important source of revenue in New Brunswick than is the case in other provinces and also that its importance is decreasing over time. A more equitable and more efficient property tax

could potentially be used to a greater extent as a means of increasing revenue, or alternatively, compensating for a reduction in the sales tax rate.

Aside from the question of additional revenue from this source, there are a number of improvements which should be considered on both efficiency and equity grounds:

- A. There is no economic rationale for the universal homeowner tax credit. This credit creates a substantial differential in effective rates between owner occupied and nonowner occupied property within the residential sector. This creates economic distortions intrasectorally (between types of housing) and intersectorally (between the corporate and noncorporate sectors). Moreover, it does nothing to alleviate the property tax burden on low income individuals relative to other taxpayers who are better off.
- B. The current homeowner tax credit should be eliminated and a uniform provincial property tax rate should be applied to all residential property. If the \$1.50 per \$100 of assessment were to apply, the property tax burden in New Brunswick might be heavier than that in other Atlantic provinces. If such is the case then perhaps the rate should be lowered.
- C. Based on current knowledge of property tax incidence the only form of credit justifiable is one aimed specifically at reducing the regressivity of the tax in the low income ranges. This could be accomplished either with a property tax credit against the income tax or through an assessment based credit. The advantage of the former is its direct link to income as an indicator of ability to pay while in the latter case it is the fact that the program would be provincially administered and that it would be easier to assess and predict the costs of the program.
- D. There is no economic rationale to justify the current split rate system whereby the rate applicable to nonresidential property is 1.5 times that applicable to residential property.

As Table X.2 illustrates, there is sufficient room to manoeuvre in improving New Brunswick's property tax rate structure while maintaining revenues and even possibly increasing these. The emphasis here should be on adjusting rates to remove the differential treatment of nonresidential and nonowner-occupied properties and eliminate the universal homeowner tax credit in favour of tax credits specifically aimed at low income groups and other senior citizens. Both

equity and efficiency aspects of the property tax would be improved by such measures.

8. Recommendations

Tax all residential property at the same rate. If property taxes were increased as a result of this change, we recommend a tax credit system directed to low-income groups and senior citizens. Consideration should be given to eliminating the discrepancy in rates between residential and nonresidential property.

Table X.2

Illustrative Provincial Property Tax Calculations for New Brunswick

Based on estimated tax base 1987-1988

(Millions of dollars)

Tax Sources	Effective Tax Rate (\$/100)	Base ¹	Revenue	Change in Revenue
<u>Current tax system</u>				
Residential:				
- owner occupied municipal property	0	4 404.7	0	N/A
- Owner occupied non-municipal property	.65	2 220.2	14.4	N/A
- other residential	1.50	3 112.9	46.7	N/A
Non Residential	2.25	3 076.5	69.2	N/A
TOTAL	N/A	12 814.3	130.3¹	N/A

Illustrative Calculations

a) Uniform rate applied to total base	1.50	12 814.3	192.2	+61.9
b) Uniform rate applied to total base	1.25	12 814.3	160.2	+29.9
c) Uniform rate applied to total base	1.00	12 814.3	128.2	-2.1
d) Current residential rate applied to nonresidential base	1.50	3 076.5	46.1	-23.1
e) Elimination of home-owner tax credit	1.50	6 624.9	99.4	+85.0

¹ Excludes utilities, 2¢ assessment levy and miscellaneous adjustments.

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Chapter XI

PAYROLL TAX

1. Introduction

One of the major options to be examined in the context of tax reform for New Brunswick is that of a payroll tax. This would be a new and potentially major tax source which could be used in combination with other taxes to relieve pressure on the sales and income tax front.

The payroll tax would have to be separately administered by the province. However, the administration costs are in all probability not high. Also, in its effect a payroll tax is not dissimilar to a credit invoice value-added tax (VAT), and so its attraction relative to a retail sales tax (also equivalent to a VAT) is not that clear cut. The main differences arise from per worker wage ceilings on the amount of tax paid that make the tax sharply regressive and from the the fact that the tax is applied implicitly on an origin basis which can penalize exports.

2. What is a Payroll Tax?

The payroll tax is a tax on labour income for businesses employing labour. The tax can be applied in several different ways. It can be as a flat percentage of payroll paid fully by the employer; or a flat percentage paid by the employee; or, as is typically done, a combination of employer and employee contributions.

It can also be a flat percentage up to a ceiling beyond which a predetermined maximum contribution level applies. This is a commonly used device, such as in the social security tax in the U.S., and with UI and CPP contributions in Canada. If there were concerns over the regressivity of such a payroll tax, it could be charged as a flat percentage of payroll above a certain

threshold level of wages per employee.

In addition to the different definitions of the base that can be adopted, the tax could also be designed in various ways. There could be, for instance, differential payroll taxes depending upon age or depending upon the family characteristics of the employee involved. It could also be the case that the second earner in the family is exempt of payroll taxes thereby alleviating some of the work disincentive effect of the tax.

In its effects, the payroll tax is much like a credit invoice value-added tax (VAT). Under a VAT, taxes on all capital expenditures are creditable in calculating taxes owing. The VAT taxes the total value of sales but allows a credit for taxes paid on material inputs. Because taxes paid on capital equipment and other investment are creditable, they offset taxes paid in future periods on the income return to assets in the form of value added. The net effect of a VAT, therefore, is to tax labour income as it accrues in the form of value added at the firm level. This is the same effect as a payroll tax.

Payroll taxes do, however, differ from a VAT in a number of crucial ways. If a third, non-capital and non-labour factor of production (land) is taken into account this equivalence breaks down, since under a VAT the income return to third factors is taxed while under a payroll tax it is not. Also, a VAT is usually applied at the point of consumption, that is, on a destination basis. Imports into the province are taxable, and taxes are rebated on exports. In contrast, a payroll tax operates as an origin basis. Because it is applied at the point of production, it can be built into production costs; and will act to impede export performance by the province.

3. Arguments For and Against the Payroll Tax

A tax of this form can clearly be used as a device to relieve pressure elsewhere in the fiscal system, and on that basis, may be viewed as highly

attractive. In addition, the tax would be a tax on labour income. In cases where provinces are trying to attract inward investment, concerns over taxing the income return to assets and the effects this may have on factor mobility would be downplayed substantially. The payroll tax is fundamentally seen as a tax on a fixed factor and, from that point of view may also be viewed as attractive.

However, the negatives of the tax are equally apparent. The payroll tax is seen as a regressive tax, and will be so if there are ceilings to contribution levels. It is, at best, equivalent to a VAT, but once land is taken into account it has a smaller tax base. Whereas a payroll tax has to be collected by the province, a joint federal-provincial VAT or BTT may give the province the chance to raise revenues with only small additional collection costs. Also, a payroll tax is an origin-based tax. It gets added into export costs thereby affecting the export potential of the province.

The most common argument against payroll taxes is the incidence argument that a tax on payroll is regressive. Because of the ceilings which apply to them, the component of the tax which applies to labour income falls as a percentage of income, as income rises. This incidence difficulty can partly be overcome by not using ceilings in applying the tax.

Table XI.1 reproduces some recent nationally-based incidence calculations, covering both employer and employee contributions to CPP and UI. These estimates in part reveal the crucial nature of the incidence assumptions used, but also clearly indicate a trend of initial progressivity over lower income ranges (due in part to the tax treatment of part-time workers) followed by a clear pattern of regressivity above the wage ceilings applicable to the tax.

TABLE XI.1INCIDENCE OF CANADIAN PAYROLL TAXES REPORTED BY WHALLEY (1984)

1972 DATA

Income Ranges in \$	Assumptions				
	1	2	3	4	5
<6500	2.3	2.6	9.7	2.4	3.4
6500 - 7500	3.8	3.5	7.8	3.9	3.4
7500 - 8500	5.0	4.4	8.5	5.1	4.3
8500 - 10000	4.6	4.1	6.6	4.6	4.0
10000 - 11500	3.9	3.6	5.2	3.9	3.5
11500 - 16000	3.5	3.3	4.5	3.5	3.3
16000 - 25000	2.6	2.7	3.3	2.6	2.7
25000+	1.7	1.9	2.1	1.6	2.1

- Assumption 1: Payroll tax on both employees and employers allocated to employee compensation.
- Assumption 2: Payroll tax on employees allocated to employee compensation. Payroll tax on employers allocated half to employee compensation, half to consumption.
- Assumption 3: As assumption 1, but using an income concept which excludes transfers; so called "broad" income (see Gillespie (1980)).
- Assumption 4: As assumption 1 with slight differences in the income concept (see Whalley (1984)).
- Assumption 5: Payroll tax on employees allocated to employee compensation. Payroll tax on employers allocated half to the employee compensation, half to factor incomes.

4. Experience Elsewhere

Payroll taxes have been widely used in a number of countries although typically not at the sub-national level. In most cases, the taxes are a method of funding old age security and health care programs. For instance, in Austria, Sweden, Greece and most West European countries, social security taxes represent well over 30 percent of tax revenues. The U.S. also relies heavily on this form of taxation. While Canada only derives 13 percent of tax revenues from social security taxes, in the U.S. the percentage is about 29 percent. A number of countries also impose unearmarked payroll taxes, that is taxes not specifically designed to finance social programs. These taxes account for about 5 percent of revenues in Australia, Austria and Sweden.

The most common payroll tax at the provincial level in Canada is the worker's compensation levy. In addition, both Quebec and Manitoba levy a tie-in payroll tax. Employers in Quebec are subject to a tax equivalent to 3.22 percent of wages dispensed. This tax represents the employers contribution to the Health Services Fund. In Manitoba the payroll tax rate is 2.25 percent and the revenues collected help finance education and health care expenditures.

It is often argued that people-related services such as health care and education should be financed according to ability to pay. The payroll tax on employers is not compatible with this principle of taxation. First there is no reason to believe that a business's payroll is related to ability to pay. Second, the employers are often in a position to shift the tax burden either forward onto consumers or backward onto labour. The latter possibility is usually considered the more likely and to the extent that the tax burden is allocated in proportion to wages the tax would be non-regressive. However, the ability of employers to shift the payroll tax will be related to factors such as the presence of labour unions, labour supply conditions, labour mobility, the

size of the firm and its control over its terms of trade. The employer payroll tax could therefore be borne more heavily by lower income employees. It is also possible that the effective tax burden could be different depending on the results of wage negotiations for individuals with otherwise similar circumstances. Further, to the extent that the tax was built into production costs, it could be passed onto consumers both within and outside the jurisdiction. Taxes on consumption are often regressive and tax exporting is generally perceived as inequitable. On the other hand, if the tax cannot be shifted it simply adds to the costs of production within the province.

These same arguments also weaken the case of tie-in payroll taxes as benefit related. Not only is it possible for the tax to be borne by individuals who do not benefit from the services which the tax helps finance but also where such payroll taxes apply there is simply no relation between taxpayer service usage and taxpayer payments. For that matter, there is also no relation between tax revenues collected and levels of expenditures incurred.

The social levies collected in Ontario, Alberta and British Columbia to help finance their medical insurance programs can also be considered a form of payroll tax. It has been argued that such levies are compatible with the benefits principle of taxation in that premiums are collected from the users of medical services. Also, because lower contribution rates apply to low income individuals and because senior citizens and welfare recipients are exempt, the tax is perceived as related to ability-to-pay. However, there are several issues related to these schemes which should be emphasized.

Medical insurance plans, as currently administered, are not benefit-related because: 1) the premiums paid are totally unrelated to usage of medical services; 2) the revenues collected through such schemes only finance a minor portion of total health care expenditures; 3) the level of health care expenditure is unconstrained by the level of premiums collected; 4) in many

cases the premiums have become part of the fringe benefits provided by employers - and as such are no different than the payroll taxes levied in Quebec and Manitoba.

It is true that health care premiums applied reflect ability-to-pay but only to the extent that welfare recipients, senior citizens and low-income earners are subsidized by the plans and to the degree that contribution levels are set to take account of the number of dependents involved. However, just as is the case with unemployment insurance and pension plan contributions, health care premium rates are only related to income up to a predetermined, relatively low taxable income ceiling (e.g. \$6000 in Ontario). Above that ceiling, payment levels are flat which means that they decrease as a percentage of income as income rises. Also, to the extent that employers pay the premiums as supplementary labour income, the aforementioned arguments related to tax shifting and ability-to-pay would apply.

5. Considerations for New Brunswick

There appears to be no valid reason to apply either a tie-in employer payroll tax or a social levy to help finance people-related services such as health care or education in New Brunswick. Such taxes are not compatible with either the benefits or the ability-to-pay principles of taxation and because of this, it is preferable to continue to finance these expenditures out of general revenues. Moreover, there are practical considerations which would seriously affect the efficiency and compliance costs of such taxes. New Brunswick has relatively more welfare recipients, senior citizens and low income earners than most other provinces. It also has higher than average unemployment levels, more seasonal employment and lower income levels per capita. These factors indicate that social programs would have to be subsidized to a greater extent than elsewhere and also that the tax base is likely to be relatively small and

unstable. Estimates produced by the New Brunswick Department of Finance indicate that a 1.5 percent payroll tax rate would yield approximately \$49.9 million or less than half the revenues collected through the gasoline tax and about 12 percent of retail sales tax collections. An OHIP type plan would produce \$54.4 million.

Finally, the fact that the provincial economy has a larger than average proportion of very small firms (premiums are usually submitted by firms above a predetermined threshold size) and the fact that a large share of the labour force are government employees, would further complicate the administration of the tax. For instance, estimates produced by the New Brunswick Department of Finance indicate that government-related employment reduces the payroll tax base by about 32 percent. As suggested earlier, if it was felt that an additional source of revenue was required to relieve pressure elsewhere in the New Brunswick tax system, a general purpose payroll tax could be designed in such a way as to remove its regressive pattern (by not using wage ceilings and/or by applying the tax above a specified wage level per employee) and to reduce its work disincentive effect (by exempting second earners or taking family and age characteristics into account). However the concerns over the efficiency of such a tax as a revenue source in the New Brunswick economy, together with the issues of the export bias of this origin-based tax, and the administration costs of a new tax, would still remain.

Chapter XII

THE COOPERS & LYBRAND REPORT: THE IMPACT OF POTENTIAL TAX
CHANGES ON SELECTED FIRMS1. Introduction

Coopers and Lybrand in consultation with members of the Tax Review Steering Committee and Department of Finance officials obtained financial information from a group of firms that comprised a cross-section of provincial industry. Coopers and Lybrand obtained detailed information about the finances and operations of each. Coopers and Lybrand used this information to develop a financial model for each firm, enabling it to vary a number of tax rates and to ascertain the impact of these tax changes on the firm's total tax obligations. The complete analysis of the results of this exercise is found in the appendix to this document. This chapter summarizes the study.

The eight companies modelled vary dramatically in size. They range from small producers to very large diversified companies. There are three firms from the food and beverage industry, one firm from the fish processing industry, one sawmilling firm, one light manufacturing firm, one large manufacturing/processing firm and one service firm. Because of the wide discrepancy in firm size and to protect the confidentiality of the data the information for all firms is presented as if a total of \$1,000,000 in combined federal-provincial taxes was paid by each firm. This standardization of each firm to a total tax payable base of \$1,000,000 enables us to compare the dollar impacts of each tax change among the different firms.

In our opinion, the most important finding of this study is that each tax change has a widely varying impact among the different firms. It is clear that any tax change will hurt some firm's after-tax profitability far more than it will hurt other firm's after-tax profitability. Furthermore, it is not easy to

determine beforehand how this differential pattern of impacts will affect a particular type of economic activity. Only through a detailed analysis based upon financial models can one hope to develop estimates of these differential impacts.

As earlier chapters have emphasized, however, this type of analysis is only a first step in understanding the complete impact or incidence of a tax change. A corporation may be able to raise its selling prices, so as to pass some of the tax forward to its customers. A corporation may be able to reduce the prices it pays for labour and other inputs, so as to pass some of the tax backward to its suppliers. These possibilities for tax shifting mean that the Coopers and Lybrand analyses are able to calculate only the first stage impact of tax changes. The variability among firms in first stage impacts must be considered in conjunction with the uncertainty about the tax shifting possibilities and further impacts. This combination of variability and uncertainty suggests that tax changes are not readily amenable to fine tuning or targeting. Some observers are particularly critical of the corporate income tax from this perspective.

Appendix A

TAX OPTIONS TESTED

With the current tax system as the base case the Coopers and Lybrand model is designed to assess the impact of a given tax change on total taxes paid by a firm. The following options were tested:

- 1) Corporate Capital Tax at 3/10 of 1 percent;
- 2) Payroll Tax at 1.5 percent;
- 3) Health Insurance Premiums at Ontario rates (assumed to be paid 50% by firms);

- 4) Sales Tax expanded to include electricity and fuel oil;
- 5) Property Tax rate on commercial property increased to \$3.00 per \$100 of assessment from \$2.25 per \$100 for the 1983 to 1985 period;
- 6) Reduce Sales Tax rate to 9 percent from 11 percent for 1985;
- 7) Reduce the standard Corporate Income Tax rate to 14 percent from 15 percent;
- 8) With the Corporate Income Tax rate at 14 percent and Sales Tax¹ rate at 9 percent introduce a Capital Tax of 0.3 percent and a Payroll Tax of 1.5 percent;
- 9) With the Corporate Income Tax rate at 14 percent and Sales Tax¹ at 9 percent introduce a Capital Tax of 0.1 percent and a Payroll Tax of 0.5 percent; and finally
- 10) With the Corporate Income Tax rate at 15 percent and the Sales Tax¹ at 11 percent introduce a Capital Tax of 0.1 percent and a Payroll Tax of 0.5 percent.

The eight firms that were modelled consist of the following:

Firm A - Food and Beverage Industry

Firm B - Food and Beverage Industry

¹The results of these tests are not summarized here but are found in the appendix.

Firm C - Food and Beverage Industry

Firm D - Service Industry

Firm E - Heavy Manufacturing/Processing

Firm F - Fish Processing

Firm G - Light Manufacturing

Firm H - Sawmilling

Each tax change is applied to each firm separately.

THE RESULTS

1) Corporate Capital Tax at 3/10 of 1 percent

* Firm A - Food and Beverage Industry

Based on the standardized model where total taxes owing are set at \$1,000,000 the introduction of the corporate capital tax of 0.3% would extract gross revenues of roughly \$11,146 from this firm in 1985. Since in the base case this firm paid both federal and provincial corporate income taxes the net impact of the introduction of the capital tax is significantly lower. In fact the firm's total tax liability would only increase by \$6,889. It would save \$3,428 in federal corporate income tax payments and an additional \$829 in provincial taxes. The net revenue increase for the Province would be \$10,317 funded roughly 33% by the federal government via reduced corporate income taxes for the firm. A similar situation is evident for this firm in each year studied.

* Firm B - Food and Beverage Industry

Based on the standardized model (i.e., total taxes paid equals \$1,000,000) the introduction of a 3/10 of 1 percent capital tax would extract gross revenues of \$22,561 from this firm in 1984. Since in 1984 this firm paid both federal

and provincial corporate income taxes and given that corporate capital taxes are treated as a production expense the net impact on the firm is only \$13,765. The Province, however, would realize a tax increase of \$20,535. This dichotomy between the tax increase to the firm and the revenue increase to the Province is explained by the \$6,769 tax decrease to the firm via the federal corporate income tax.

• **Firm C - Food and Beverage Industry**

This tax change would result in a gross tax liability of \$28,764 per \$1,000,000 in total taxes paid. This was partially offset by a \$3,399 federal income tax reduction and a \$1,064 provincial income tax reduction. These reductions resulted from the fact that the firm's taxable income was reduced by the amount of the capital tax. The net tax increase to the firm is \$24,301. The Province would receive an additional \$27,700 which is partially funded by the federal income tax reduction for the firm.

• **Firm D - Service Industry**

For this firm introducing a corporate capital tax would be the second most onerous tax change tested. Only a property tax increase is more burdensome. In 1985 a 0.3% corporate capital tax would raise this firm's gross tax liability by \$35,001 per \$1,000,000 of total taxes paid. The net increase for the firm would be \$22,488. The Province would receive a net revenue increase of \$33,251 of which \$10,763 would be funded by a federal income tax decrease.

• **Firm E - Heavy Manufacturing/Processing**

Based on the standardized model which sets total taxes paid at \$1,000,000 the introduction of a 0.3% corporate capital tax would extract gross revenues of \$78,209 from this firm in 1985. The net impact of this measure is \$77,693 for both the firm and the Province. This is the case because the firm paid no

corporate income taxes (from which it could deduct its capital taxes) to the federal government.

It is interesting to note that for this firm the introduction of a capital tax is the most burdensome tax of those tested by the model. In fact a 0.3% capital tax would represent the fifth largest government sector levy faced by this firm behind the provincial sales tax, the federal sales tax, UIC premiums and property taxes.

* **Firm F - Fish Processing**

In 1983 the introduction of a 0.3% capital tax would cost Firm F \$25,578 in gross terms. However, since the capital tax is deductible for income tax purposes the firm would save \$7,865 in federal income taxes and \$3,581 in provincial income taxes. Therefore, the net tax increase to the firm is \$14,132 and for the Province \$21,997.

* **Firm G - Light Manufacturing**

In 1985 the introduction of a capital tax would extract \$21,622 gross revenues from this firm. The firm would save no federal income taxes since it did not pay any but would save \$2,432 in provincial income taxes. This results in a net impact to the firm and to the Province of \$19,190 per \$1,000,000 in total taxes paid in the base case.

* **Firm H - Sawmilling**

In 1985 the introduction of a 0.3% corporate capital tax would cost this firm \$24,045 per million dollars of total taxes paid.

2) Payroll Tax at 1.5 Percent

* Firm A - Food and Beverage Industry

A 1.5% payroll tax would create a gross tax liability of \$10,699 and net tax increase (after deducting this tax for income tax purposes) of \$7,225 for every \$1,000,000 in taxes paid by the firm. The increase in provincial revenues resulting from the payroll tax is \$10,022 from this firm, however, the firm would save \$2,797 in federal income tax. Therefore, the payroll tax would in effect be partially paid by the federal government (27.9%) via the reduced corporate income tax liability.

* Firm B - Food & Beverage Industry

For this firm the introduction of a 1.5% payroll tax represents the second most dramatic tax increase tested. This indicates that this firm may have a labour intensive production process. The payroll tax would create a gross tax liability of \$109,796 and a net tax increase to the firm of \$66,992 for every \$1,000,000 in taxes the firm currently pays. The increase in provincial revenues would be \$99,931, however, from this the firm would save an additional \$32,939 in federal income taxes. For this firm the federal government effectively pays 33% of the net tax increase to the Province.

In terms of provincial taxes if the payroll tax were to raise \$109,796 per million dollars of total tax it would become the second most important provincial tax levied only slightly smaller than the sales tax.

* Firm C - Food & Beverage Industry

For Firm C a 1.5% payroll tax represents the largest tax increase tested. The gross tax increase is \$51,080 which is reduced by income tax savings of

\$6,400 federally and \$2,000 provincially. The net tax increase to the firm is \$42,680 while the Province would receive an additional \$49,080.

* Firm D - Service Industry

A 1.5% payroll tax has a relatively light impact on Firm D compared to other participating firms. The gross tax increase to the firm is only \$11,829 while the net tax increase to the firm is \$8,234. The Province would receive an additional \$11,326 of which \$3,092 is indirectly financed by the federal government via reduced federal corporate income taxes.

* Firm E - Heavy Manufacturing

A 1.5% payroll tax would generate a gross tax liability for Firm E of \$73,579 per million dollars of total taxes paid. Because of the negligible income taxes paid by this firm the net tax increase for the firm would be \$73,063. This is identical to the net tax increase for the Province since no federal income tax was paid.

* Firm F - Fish Processing

A 1.5% payroll tax would generate a gross tax liability of \$59,888 for Firm F. The net tax increase for the firm would be \$33,089. The Province would receive \$51,504 in additional taxes from the firm. For this firm this tax measure represents the second most burdensome measure tested.

* Firm G - Light Manufacturing

This is the most burdensome tax change tested for this firm. It would generate a gross tax liability for the firm of \$141,997 per \$1,000,000 of total taxes. This would mean if introduced a payroll tax would be the third largest government sector charge this firm would face, behind only UIC payments and the

federal sales tax. The net tax increase to the firm and the Province would be \$126,023.

* Firm H - Sawmilling

This tax measure would be the second most burdensome tax change for this particular firm. The firm's tax liability would increase by \$75,712.

3) Health Insurance Premiums at Ontario Rates (assumed to be paid 50% by Firms)

* Firm A - Food and Beverage Industry

For the purposes of testing the model's results a health insurance premium at Ontario rates was assumed to apply with 50% of the premiums paid by the employer as fringe benefits. This ratio would vary from firm to firm and from industry to industry and is offered for illustrative purposes only.

For this particular firm the introduction of health insurance premiums (assuming they eventually paid 50% of the tax) is the most burdensome tax change tested. In 1985 this measure would increase gross taxes by \$25,316 per million of total taxes paid. The net revenue gain to the Province would be \$23,524 while the net tax increase to the firm would be reduced \$16,117 because federal corporate income taxes would be reduced by \$7,407. The federal government would in effect finance almost 31.5% of the net increase in revenues to the Province.

* Firm B - Food and Beverage Industry

To analyze the impact of a health insurance premium Ontario's rates were chosen and it was assumed that 50% of the premiums were paid by the employer as fringe benefits.

tested. In fact if it were implemented it would represent the single largest provincial tax liability faced by this firm.

In 1984 this measure would increase the firm's net tax liability by \$91,119 and would increase the Province's taxes from this firm by \$135,919. This is accomplished by a reduction in federal corporate income tax of almost 33% of the net tax increase to the Province or \$44,801.

* **Firm C - Food & Beverage Industry**

Health insurance premiums at Ontario rates which are 50% paid by the employer would cost Firm C \$30,423. The firm's federal income tax liability would be reduced by \$3,800 and its provincial income tax liability would fall by \$1,000. The net tax increase to the firm would be \$25,623 in 1985. The tax increase to the Province would be \$29,423.

* **Firm D - Service Industry**

This represents the third largest tax increase tested for Firm D. The firm's gross tax increase would be \$20,881. This would be partially offset by a corporate tax reduction of \$6,042 at the federal level and \$982 at the provincial level. Therefore, the net tax increase for the firm is \$12,857 while the Province would receive an additional \$19,898 per \$1,000,000 in total taxes paid by the firm in the base case.

* **Firm E - Heavy Manufacturing/Processing**

In order to test the impact of introducing a health insurance premium Ontario rates were modelled. It was assumed that the firm would pay 50% of the premiums. Of course this ratio will vary from firm to firm and industry to industry, however, for illustrative purposes the 50% level was chosen.

The firm's gross tax liability from a health insurance premium would be \$46,864 and the net tax increase would be \$46,349.

* **Firm F - Fish Processing**

The health insurance premium rates chosen are identical to Ontario rates. It was assumed that 50% of the premiums were paid by the employer as fringe benefits. While this may not be the case for this particular firm the same assumption was made for all firms modelled.

Introducing health insurance premiums would generate a gross tax increase of \$90,761 per \$1,000,000 in total taxes in 1983. The firm would save \$33,403 in federal income taxes and \$12,706 in provincial income taxes. This results in a net tax increase to the firm of \$44,652 and a net tax increase to the Province of \$78,056.

The health insurance premiums represent the single largest tax increase this firm would face given the tax changes tested by the model.

* **Firm G - Light Manufacturing**

A health insurance premium at Ontario rates (assuming the firm pays 50% of the premiums) would cost the firm \$110,853 in total. After the provincial income tax savings are accounted for the net cost to the firm is \$98,400. This represents the second largest tax increase for the firm.

* **Firm H - Sawmilling**

The model tested a health insurance premium at Ontario rates. Since this type of premium is often paid by the employer as a fringe benefit it was assumed that every firm modelled would pay 50% of the premiums. Given these assumptions Firm H would face an additional tax liability of \$55,036 per million dollars of total taxes paid in 1985.

4) Sales Tax Expanded to Include Electricity and Fuel Oil

* **Firm A - Food and Beverage Industry**

For this firm taxing fuel oil and electricity represents the second largest tax increase tested. The gross tax increase would be in the order of \$15,500. The net tax impact on the firm would be \$10,096 while the provincial government would receive an additional \$14,500. This is brought about by the ability of the firm to pass this item off as a cost for income tax purposes.

* **Firm B - Food and Beverage Industry**

For this firm taxing electricity and fuel oil represents the third largest tax increase tested. The gross tax increase would be \$59,866 while the net increase to the firm would be \$36,527 and the tax increase to the Province would be \$54,487.

* **Firm C - Food and Beverage Industry**

This measure represents the second largest tax increase to the firm resulting from the tax changes tested. Firm C's gross tax liability would increase by \$47,753. Its federal income tax payment would be reduced by \$5,689 while its provincial income taxes would drop by \$1,767. This results in a net tax increase to the firm of \$43,297. The net tax increase for the Province would be \$45,986.

* **Firm D - Service Industry**

For this firm this measure has a relatively small impact both internally and in comparison to the other firms modelled. The net tax increase to the firm

is only \$4,140 while the net revenue increase for the Province is \$5,921 per million dollars of total tax paid.

* **Firm E - Heavy Manufacturing/Processing**

For this firm taxing fuel oil and electricity represents the second largest tax increase tested. This measure is only marginally smaller than the increase associated with the introduction of the capital tax. The gross tax increase associated with taxing fuel oil and electricity is \$77,932 and the net tax increase is \$77,416 compared to a gross tax increase of \$78,209 and a net tax increase of \$77,693 for the capital tax.

The addition of fuel and electricity impacts more heavily on this firm per million dollars of taxes paid than on any other firm except the firm from the sawmilling industry.

* **Firm F - Fish Processing**

This measure would result in a gross tax increase of \$23,175 per million dollars of total taxes paid. The net tax increase for the firm is \$12,805 while the Province would receive an additional \$19,931.

* **Firm G - Light Manufacturing**

Extending the sales tax to electricity and fuel oil creates a gross tax liability of \$21,178 and a net tax liability of \$18,796 for Firm G. Only Firm A and Firm D would pay less as the result of extending the sales tax to electricity and fuel oil.

* **Firm H - Sawmilling**

Due to the nature of this industry this firm uses a relatively large amount of electricity and fuel oil in its production process. Therefore, for this firm

taxing fuel oil and electricity represents the single largest tax increase tested. In 1985 this measure would cost the firm \$80,219 per million dollars of total taxes paid. On a relative basis this industry is hit hardest by this measure.

5) Property Tax Rate on Commercial Property Increased to \$3.00 per \$100 of Assessment from \$2.25 per \$100 for the 1983 to 1985 Period

* **Firm A - Food and Beverage Industry**

For this firm such a property tax increase is the least expensive of the tax increases tested. The gross tax increase would be \$4,984 while the net increase in taxes to the firm would be \$3,081. The Province would see a tax increase of \$4,613.

* **Firm B - Food and Beverage Industry**

This represents a relatively modest tax increase for Firm B. The gross tax increase would be \$15,032 and the net increase for the firm would be \$9,173. The Province would receive an additional \$13,682 in revenues per \$1,000,000 in total tax paid.

* **Firm C - Food & Beverage Industry**

This tax measure has relatively modest impact on Firm C. The gross increase is only \$10,653. From this gross tax increase \$1,290 can be deducted from federal income taxes and \$394 from provincial income taxes bringing the net tax increase to the \$8,969 per \$1,000,000 of total taxes paid. The net tax increase to the Province is \$10,259.

* **Firm D - Service Industry**

For this firm this is the single most important tax change contemplated. In fact when the tax increase associated with this measure is added to the already significant property tax payments made by this firm the property tax rivals the federal corporate income tax in terms of total taxes paid.

The gross tax increase is \$52,105 while the net tax increase to the firm is \$33,478. The net tax increase to the Province is \$49,500 per \$1,000,000 of total taxes paid.

* **Firm F - Fish Processing**

For this firm this measure is relatively small; only \$8,025 in gross taxes would result. Based on this increase the firm would be able to reduce its federal corporate income tax payments by \$2,468 and their provincial corporate income taxes by \$1,123. This results in a net tax increase for the firm of \$4,434 and a net tax increase for the Province of \$6,902.

* **Firm G - Light Manufacturing**

This measure would generate a gross tax increase for Firm G of \$26,500 per \$1,000,000 in total taxes. The firm would save \$2,981 in provincial income taxes resulting in a net tax increase to the firm and the Province of \$23,519.

* **Firm H - Sawmilling**

The property tax increase would cost the firm \$10,949 per million dollars of total taxes. For this firm the property tax increase has the smallest impact of any tax change modelled.

6) Reduce Sales Tax Rate to 9 Percent from 11 Percent for 1985*** Firm A - Food and Beverage Industry**

For Firm A this measure is by far the single most generous reduction in taxes tested. The gross tax reduction to the firm would be \$32,780. Since expenses would be reduced by this amount the firm would see an income tax increase of \$5,243 federally and \$1,029 provincially. The net tax decrease for the firm would be \$26,507. However, the Province would see a tax reduction of 431,750. For this firm reducing the sales tax to 9% would more than offset any of the tax changes tested by the model.

*** Firm B - Food and Beverage Industry**

The effect of lowering the sales tax rate to 9% are far less evident for this firm than for Firm A. The final value of the sales tax reduction to the firm is \$20,009 and for the Province \$20,011.

*** Firm C - Food and Beverage Industry**

In 1985 the sales tax reduction would save this firm \$16,741 in total. The net tax increase for the firm is \$11,097 and for the Province \$16,139. This firm would pay an additional \$5,042 in federal income taxes and \$602 in provincial income taxes.

*** Firm D - Service Industry**

This tax reduction would generate gross tax savings for this firm of \$24,721 per \$1,000,000 of total tax paid. The net tax reduction for the firm is \$22,755 while the net tax reduction for the Province is \$24,810.

* **Firm E - Heavy Manufacturing/Processing**

The 2% reduction in the sales tax would save this firm \$57,477. However, this saving would result in a federal corporate income tax liability of \$8,656 and a provincial income tax increase of \$1,494. Therefore, the net tax decrease for the firm would be \$47,326 while the Province would lose \$55,983 per million dollars of total taxes paid.

* **Firm F - Fish Processing**

Reducing the sales tax rate to 9% would save this firm \$48,744 per \$1,000,000 in total taxes. The tax increase to the Province is identical. It is unclear why but there is no increase in income tax resulting from the reduction in costs associated with the sales tax reduction. While this appears odd on the surface a thorough review of the firm's financial statement reveals the answer to why this happens.

* **Firm G - Light Manufacturing**

This would cost the Province \$14,016 in sales taxes. It is interesting to note that \$4,331 of this is directly related to the sales tax on telephones. The net tax savings to the firm is \$12,672.

* **Firm H - Sawmilling**

This measure would save the firm \$35,832 in 1985. The tax savings from this measure would offset the corporate capital tax and the property tax increase combined. It would also substantially offset the tax increase associated with health insurance premiums.

7) Reduce the Standard Corporate Income Tax Rate to 14 Percent from 15 Percent

* **Firm A - Food and Beverage Industry**

This measure would reduce the tax liability of Firm A by \$2,933 per million dollars of tax paid. The reduction in revenues to the Province from this firm would also be \$2,933. No reduction in federal taxes would occur.

* **Firm B - Food and Beverage Industry**

The impact of this measure is identical for the firm and the Province; both would see a tax reduction of \$2,778 per \$1,000,000 in taxes paid by the firm.

* **Firm E - Heavy Manufacturing/Processing**

Since the effective provincial income tax rate on this firm is less than 14% reducing the statutory corporate tax rate to 14% has no impact.

* **Firm F - Fish Processing**

Since the firm's effective corporate tax rate at the provincial level is already less than 14% reducing the statutory tax rate to 14% has no impact on the firm.

* **Firm G - Light Manufacturing**

In 1985 this measure saves the firm \$9,271 per \$1,000,000 of total taxes paid in the base case.

* **Firm H - Sawmilling**

Since this firm paid no corporate income tax, a reduction in the corporate income tax would have no direct affect on its profitability.

Chapter XIII

CONCLUSIONS AND RECOMMENDATIONS1. Introduction

We have sought to present our description of existing tax provisions and our analyses of reform options in a manner that will facilitate public discussion and political decisions. With this purpose, we have suggested the disadvantages as well as the advantages of a large number of reform options. The reader can reach his or her own conclusions based upon a judgement concerning the relative importance of these disadvantages and advantages, and based upon a judgement concerning the various trade-offs among competing social objectives. In this chapter, we present our recommendations based upon our judgements of these issues. Hence, this chapter is more subjective than the earlier chapters. Furthermore, it is written from the perspective of the 1987 economic situation. A shift sometime in the future to full employment and rapid economic growth could alter our judgement concerning competing social objectives and consequently could alter our recommendations for tax reforms in such a future economic environment.

We first review this volume by listing our recommended changes under the tax categories that have been delineated by our chapter headings. Then we consider the combined list from several broad perspectives: the tax changes that would improve economic efficiency; the tax changes that would do most to improve equity; the tax reductions that would do most to stimulate growth and job creation; the revenue increases that would yield a minimum of distortion; and the appropriate reaction by New Brunswick to federal reform proposals.

2. A Review

In Chapter I, we emphasize that the New Brunswick tax reforms must be

designed with several objectives in mind, including the following: the need to raise adequate revenue to cover required expenditures; the concern about growth and job creation; the desire to achieve equity among taxpayers; and the advantages of harmonizing taxes with those of the federal and other provincial governments, while still maintaining an appropriate measure of political independence and also advancing New Brunswick's economic self-interest. Chapter I has noted the very important point that expenditure programs can usually be devised to achieve these objectives as an alternative to implementing changes in the tax system. Welfare programs can be implemented to satisfy equity concerns. Subsidy programs can be instituted to stimulate certain economic activities such as R&D or capital investment, and these can be targetted at specific types of firms, such as small business. Consequently, tax reforms should not be chosen in isolation from a consideration of expenditure programs. Furthermore, possible restrictions on New Brunswick tax reform options that result from its membership in the tax collection agreements may be circumvented through the creation of expenditure programs.

In Chapter II, we examine the history of tax changes in New Brunswick over the past two decades. At the end of the 1960s, the "equal opportunity" reforms involved a new comprehensive division of revenue and expenditure responsibilities between the provincial and local governments. It is tempting to focus on a dramatic set of changes like this as the time of greatest reform. However, Chapter II emphasizes that a long series of separate tax changes throughout the 1970s and 1980s resulted in a gradual transformation that was substantial. Consequently, it is instructive to consider the percentage of total provincial revenue that the New Brunswick government receives from each type of tax. It is also helpful to see how this choice of tax mix has changed over time and how it differs from the tax mix of other provinces. The

opportunity to change this tax mix forms an important component of the set of options facing New Brunswick today.

In Chapter III, we consider the types of reform proposals that the federal government would like to implement. These will have a direct impact on New Brunswick revenues because of the tax collection agreements. Lower personal income tax rates will mean that New Brunswick's 58 percent rate applied to the federal tax payable will yield a lower revenue. Somehow, New Brunswick will have to compensate for the lost revenue, perhaps by raising its rate above 58 percent. The personal income tax (PIT) is New Brunswick's most "progressive" tax. The higher income groups pay a larger percentage of their income in tax than do the lower income groups. Hence, a decrease in the revenue derived from the PIT would alter after-tax income distributions in New Brunswick. That is, federal reform will reduce the overall progressivity of the New Brunswick tax system. For this equity reason, as well as for revenue reasons, we believe that New Brunswick should raise its 58 percent PIT rate in reaction to this expected federal reform. An acceptable alternative would be to introduce a new flat tax on taxpayers above a certain income level, say \$20,000.

Probable federal reforms will also include a broadening of the corporate income tax base, by reducing certain exemptions and deductions. This will hurt investment incentives in New Brunswick, as well as the natural resource industries. We believe that New Brunswick should introduce new programs to counteract these changes. In view of the tax collection agreements, New Brunswick may have to focus on new expenditure programs of grants or wage subsidies for particular types of economic activities.

Among federal reform proposals is the elimination of the federal manufacturers' sales tax (MST) and the introduction of a new type of value-added tax (VAT). New Brunswick could impose a surtax on this federal VAT to be collected by the federal administration. Should New Brunswick eliminate its

retail sales tax and enter into a new sales tax collection agreement with the integration of federal and provincial sales taxes? For New Brunswick, this will be the most important question rising from the federal reform proposals. We believe that a decision to integrate the provincial retail sales tax with a federal VAT would be a watershed decision in the history of New Brunswick. It would tie the hands of future provincial governments which would lose their freedom to alter the base, exemptions, and perhaps even the rates for this tax. We would maintain a separate retail sales tax (RST). In future years, this position could be re-evaluated, of course, in the light of actual experience with administrative costs and complexities involved in the parallel tax.

In Chapter IV, we explain our judgement that New Brunswick's choice of reforms should at this point in time be motivated primarily by the need to stimulate economic growth and create jobs. Several factors in the international economic environment are putting new competitive pressures on New Brunswick. Creative adjustments by businesses and by individuals will be essential. Tax reforms should be designed to encourage and support such adjustments, including new investments in machinery and equipment and also further investments in human capital through education, retraining, and research. Current international negotiations for freer trade will increase this need for creative adjustments. Hence, the basic thrust in New Brunswick tax reforms should be towards the objective of economic growth and job creation. Chapter IV emphasizes the need to encourage small businesses. Throughout the world, small businesses have generally been the most innovative and have contributed most to growth in employment.

In Chapter V, we examine the Quebec Stock Savings Plan and consider whether New Brunswick should adopt a similar taxed based incentive plan to stimulate investment. The Saskatchewan Stock Savings Credit Plan and the Nova Scotia 1986 budget proposal are also examined from this perspective. We conclude that New

Brunswick should not institute such a plan today. Rather, New Brunswick should evaluate these tax experiments over the next few years and make a future decision on the basis of Saskatchewan and Nova Scotia's actual experiences. Stock savings programs can be designed to assist employees to purchase shares in the corporations for which they work. Ontario's recent employee stock option program is an example of this. Quebec now has a program which offers tax concessions for stock purchases in an investment fund directed by union representatives. We argue against the latter but we do recommend on a limited, carefully monitored basis, a new employee stock option program for New Brunswick as a means of encouraging employee concern for productivity and quality improvements. Meanwhile, new tax credit or expenditure programs should be adopted to assist small businesses, since we believe these changes can be targetted at new investment and job creation more effectively. In New Brunswick, many expanding small businesses would not be able to utilize a stock savings plan, while they could be stimulated through tax credit or expenditure programs geared to new investment and job creation.

In Chapter VI, we focus on the personal income tax (PIT). Some specific changes were already discussed in the context of probable federal reforms. We also recommend new tax credits for all low income people, and new surtaxes for upper income people. We recommend these changes as a necessary complement to the broadening of the sales tax base which is recommended in Chapter IX. Our recommendation to eliminate many of the current sales tax exemptions would hurt low income groups. In addition, if our recommendation to tax all residential property at the same rate were achieved by reducing the homeowner tax credit, this would affect seniors at a time in their life when they cannot readily adjust their income and expenditure patterns. If such a change were made in the property tax, we recommend PIT credits for senior citizens.

In Chapter VII, we examine the corporate income tax (CIT). We recommend that the current 15 percent rate be maintained. In its 1987 budget, New Brunswick introduced a narrowly based capital tax for financial institutions. We recommend that a new broader corporate capital tax be introduced. This capital tax would not be advantageous if New Brunswick were an independent nation. Nevertheless, the fact that a capital tax would be deductible from the CIT means that it would divert tax revenue from the federal government, leaving New Brunswick better off. Small businesses should be exempt from a new capital tax. This would help restore revenue reductions arising from our recommendation to reduce sales taxes on producer inputs.

We recommend a generous tax credit for investment by small incorporated businesses. We believe that for any specified level of tax concession, such a tax credit would be most effective in stimulating growth and job creation. If necessary for revenue purposes, the preferential small business tax rate could be eliminated to compensate for the revenue losses of a new investment tax credit.

Our emphasis on education, retraining and research underlies our recommendation for new tax credits in this area. Nevertheless, we draw attention to the need for careful definitions and supervision to prevent inappropriate manipulation by taxpayers.

In Chapter VIII, we consider entrepreneurship and the small business sector. We raise a number of issues not directly related to tax reform, indicating that tax reform is only one element in the process of encouraging small business. Corporate tax credits to stimulate investment and job creation have been discussed above. These tax credits could apply to all small businesses, unincorporated as well as incorporated, and might cover investment in human capital through education and retraining as well as investment in new buildings, machinery and equipment.

In Chapter IX, we recommend reforms to the retail sales tax (RST). We discuss the long list of current exemptions to the New Brunswick sales tax, and we recommend that many of these exemptions should be eliminated. The exemptions create distortions in consumption decisions without adding any compensating usefulness to the tax system. On the other hand, to the extent that it is financially and administratively feasible, we recommend the removal of the RST on all capital goods and services as well as all intermediary inputs, including labour. Under the RST, only final consumption purchases for personal use should be taxed. The elimination of many of the current exemptions should be accompanied by a lowering of the current 11 percent RST rate, perhaps to 10 percent. This could be done without any net loss of tax revenue. In this chapter, we address once more the implications of a new federal VAT for New Brunswick's retail sales tax. The analysis here raises a series of important questions that should be addressed in deciding upon the question of integrating these taxes.

Excise taxes are a type of sales tax levied on a specific product such as liquor, tobacco, and gasoline and motive fuel. We believe that these should be raised. These increases would not create any significant distortions or inequities.

In Chapter X, we describe the property tax system in considerable detail. We recommend that all residential property should be taxed at the same rate. If this is accomplished by raising the rate in owner-occupied residential property, we recommend a low-income credit against the income tax or assessment. There is no economic rationale whereby the rate applicable to nonresidential property is 1.5 times that applicable to residential property. Hence this rate differential should be reconsidered. However, it is noted that current nonresidential rates are competitive with other provinces.

In Chapter XI, we consider payroll tax options, including those to cover medical insurance. We recommend against payroll taxes. Such taxes are not compatible with either the benefit or the ability-to-pay principles of taxation. It is best to continue financing expenditures such as education and health care out of general revenues.

In Chapter XII, the results of the Coopers & Lybrand study are summarized. The findings of this study emphasize that each particular reform would impact different firms differently. Analyses of each potential tax reform result in conclusions concerning average impact. The Coopers & Lybrand study indicates that a wide dispersion of impacts will occur about this average. This insight helps to explain why the public - or at least a large proportion of the public - object to any tax changes. Even if the average impact of a tax change is favourable, nevertheless, many individuals and firms will be hurt, and many will be made worse off than others. That is, tax reform is really a re-writing of the society's "social contract", and as such it is a particularly difficult process. In our report, we emphasize that there are important additional repercussions of each reform option, beyond those indicated in the Coopers & Lybrand study. A corporation may raise its prices, so that its customers pay part of the tax. A corporation may also reduce the prices that it pays for labour and other inputs, so that its suppliers pay part of the tax. Following is a summary of our recommendations.

General

Approximate Revenue Impact (\$)

1. We recommend the basic tax structure be retained, that is no payroll tax or hospital insurance premium. (This means that at least some traditional taxes will be high in relation to other provinces which levy these new taxes or have significant natural resource revenue).

Approximate
Revenue Impact
(\$)

2. We recommend that the sales tax be reduced to 10 percent.

-45 million

Economic Efficiency

1. Broaden sales tax base to include more goods and services.
2. Remove sales tax on production inputs, such as consumables, to the extent administratively feasible.
3. Retain tax on services to tangible personal property, but exempt business purchases where the tax now gives a significant advantage to large companies with in-house repair facilities. We would limit the benefit of this proposal plus the proposal in 2 above to a total of \$20 million.
4. Consideration be given to taxing residential and non-residential property at the same rate (a more complex issue requiring further work).

+45 million

-20 million

Equity Concerns

1. Residential Property be taxed at the same rate regardless of whether it is owner occupied.
2. If base broadening in sales tax and changes to property tax increase the tax burden on low income earners we recommend a low income tax credit on the personal income tax.
3. In addition to the above we would recommend a tax credit for seniors.

0 to +85 million

-10 million
maximum

-5 million
maximum

Economic Growth

1. The most effective tax based economic development incentive is an investment tax credit. We recommend an investment tax credit over a stock savings plan or other similar investment schemes. We recommend a total incentive of \$10 million for small business.
2. We recommend a similar incentive for large businesses.
3. Introduce an education and retraining tax credit for the use of businesses. This could be designed for any specified level of tax incentive. We recommend

-10 million

-10 million

	<u>Approximate Revenue Impact (\$)</u>
a total incentive of \$10 million, which would provide a \$1,000 tax credit for 10,000 employees annually.	-10 million
4. <u>Introduce a research tax credit.</u> This could be designed in a variety of ways. We recommend a total incentive of \$10 million, designed to maximize research collaboration between businesses and universities.	-10 million
5. We recommend a limited employee share ownership incentive to encourage firms to explore this method of employee participation in the business.	-1 million

Revenue

When tax concessions are granted or improvements are made in the system that reduce revenue, other sources of revenue must be found. Following are the taxes that we would recommend increasing to offset revenue losses elsewhere.

	<u>Approximate Revenue Impact (\$)</u>
1. Introduce a capital tax on all corporations except for those defined as small business under the income tax act. At a .3 percent rate, this tax would offset revenue loss due to sales tax breaks recommended for industry.	+20 million
2. Increase taxes on liquor, tobacco and gasoline and motive fuel. Each percentage increase in revenue from these sources amounts to \$3 million.	+3 million for each one percent increase
3. Introduce a flat tax on personal income on people earning more than \$20,000. This would yield \$35 million at a rate of 1 percent.	+35 million for a rate of one percent

Recommended Reactions by New Brunswick to Federal Reform Proposals

1. Do not integrate the provincial retail sales tax with the new federal VAT. After a few years of VAT's operation, it will be possible to evaluate the impact of the VAT and to consider the implications of integration.
2. Recognize that the federal reform program is effectively a new deal for federal-provincial financial relations, and that New Brunswick may be made worse off in terms of:

- a) Personal income for its residents;
- b) After-tax profitability for many of its businesses;
- c) Provincial government revenue.

Consequently, we recommend that New Brunswick assert its right to fair financial compensation. This financial compensation could occur through a number of alternative transfer mechanisms. We expect that Newfoundland, Nova Scotia, and Prince Edward Island will be in a similar situation, and so joint collaboration in analyses and negotiations may be appropriate.

- 3. If the federal government refuses to permit the new tax credits recommended above then new expenditure programs should be designed to achieve the same purposes. These can be designed to have the same expenditure costs as would occur with foregone revenues.
- 4. We recommend raising the PIT rate which is currently 58 percent rate and/or introducing a new surtax to make up revenue lost as a result of federal tax reform, if Ottawa does not provide compensation.

APPENDIX A

AN ASSESSMENT OF THE IMPACTS
OF POTENTIAL TAX CHANGES
ON
SELECTED PROVINCIAL FIRMS

by
The Coopers & Lybrand Consulting Group
Economics Practice
June 1987

I. INTRODUCTION

In 1984, the New Brunswick Government announced its intention to review the Province's tax system. The object of the review was to assess the current tax system in place in New Brunswick with respect to its impact on provincial growth and investment and to consider the fairness of the system for both individuals and businesses.

The Coopers & Lybrand Consulting Group (CLCG) was retained to undertake a study of the New Brunswick tax system. In order to gain as accurate a picture as possible of the economic impact of possible tax changes at the individual firm level, CLCG developed a series of detailed financial models. These models are firm-specific and cover firms operating in several economic sectors. To ensure that the models are as realistic as possible, it was necessary to solicit the participation of key companies in those sectors.

The Coopers & Lybrand Consulting Group, in consultation with members of the Tax Review Steering Committee and Department of Finance officials, compiled a list of approximately twenty firms to be contacted. These firms were chosen to comprise a representative cross-section of the provincial economy.

Once the initial list of representative firms was established, the Minister of Finance, or in some cases, a member of the Steering Committee, contacted representatives of each firm. Most of the firms contacted were interested in participating in the Tax Review. However, several key firms declined to participate. In some industries, it was impossible to find a replacement firm to participate. For this reason, the scope of the sectors covered became narrower than originally intended.

II. THE QUESTIONNAIRE

Having established the list of firms willing to participate in the Tax Review it was then necessary to prepare a detailed questionnaire to collect the financial and operating data necessary to construct the models. In order to ensure that the information obtained was as representative as possible data for five fiscal years were requested, beginning in fiscal 1980-81.

The data required covered the following aspects of a standard firm's operations:

- 1) Income Statement.
- 2) Balance Sheet.
- 3) Statement of Change in Financial Position.
- 4) Employment.
- 5) Capital Consumption Allowances.
- 6) Investment Tax Credits.
- 7) Property Taxes.
- 8) Borrowing.
- 9) Royalties.
- 10) Miscellaneous Data.

The detailed questionnaire appears as Appendix I. The information was collected and analyzed by The Coopers & Lybrand Consulting Group and was obtained on a strictly confidential basis.

The questionnaire was extremely detailed and required significant input by senior people in the participating firms. In fact, several firms which had originally indicated interest in participating declined to do so once the information requirements and the time needed to complete the form became evident. Furthermore, several of the participating firms could not provide sufficient information to be modelled. In some cases, replacement firms were found but, in others this proved difficult.

As the model was developed, it became necessary to augment the information obtained via the questionnaire. This was particularly true when it came to estimating the impact of the sales tax and the provincial corporate income tax. In the case of the sales tax, it was necessary to contact each firm to establish the percentage of the firm's total purchases which attracted New Brunswick sales tax. The firms had to be contacted for additional information relating to their corporate income tax in order to assess more fully the actual taxes paid.

Many of the firms had to be contacted more than once for a variety of information. The patience and cooperation of the firms involved were instrumental in determining the success of the models. Without their attention to detail and accuracy, the models could not have been developed nor relied on. It is through the generosity and cooperation of the participating firms that the CLCG financial models could be fully developed.

III. THE MODEL

The purpose of producing financial models of the firms participating in the Tax Review was to establish a framework which could be used to assess the impacts of various taxes on actual companies in the Province. In order to accomplish this the models had to be comprehensive. Because each company provided data in a slightly different fashion and, because of the diverse nature of the companies involved, the models which evolved had to be company-specific. That is to say, each model is slightly different from every other model. This is particularly true for the sales tax where the ratio of taxable purchases to total purchases varies significantly from firm to firm. Despite the models' individual nature, the results generated by simulations are consistent from model to model.

As the models developed, it became obvious that they could not be used to establish the impact of tax changes on a firm's marketing or distribution processes. Nor could the models be used to assess the impact of tax changes on the firm's profit or loss position. Therefore, the primary use of the models as they were developed became one of establishing the change in a company's taxable position, resulting from a selected tax change.

During the development of the company-specific models, it became obvious that the information provided by some of the firms was not sufficient to enable a workable model to be developed. Every effort was made to augment the data. However, some firms had to be dropped from the review. This data problem, combined with the fact that several of the firms initially chosen declined to participate, reduced the coverage

of the models to the manufacturing and service sectors. While these sectors are extremely important parts of the New Brunswick economy, it was initially intended that the models would cover all of the key sectors of the economy. In total, it was possible to construct detailed models for only eight firms. This is a significant reduction from the original number of firms contacted. However, this is not a function of the project's design, but of the inability to obtain sufficient data for a broad enough range of companies.

The companies modelled vary dramatically in size. They range from small, marginal producers to large, diversified companies. There are three firms from the food and beverage industry, one firm from the fish processing industry, one sawmilling firm, one light manufacturing firm, one large manufacturing/processing firm and one large firm from the service sector. Because of the wide discrepancy in firm size and to protect the confidentiality of the data, the information for all firms is presented as if a total of \$1,000,000 in combined federal-provincial taxes was paid by each firm.

As indicated above, the basic design of the model was to address the impact of tax changes on the total tax liability of the firms modelled. As a starting point for the model, the rates for all taxes and government sector charges currently in effect in New Brunswick were established, as well as those to be tested by the model. These include federal, provincial and local taxes and government charges, and appear in Exhibit I. To ensure that the model could be used to test not only the current New Brunswick tax system but also any change contemplated, a table of tax levers was developed. If the tax lever is set at 1, then the tax is assumed to apply in the

EXHIBIT I

BASE CASE

FINANCIAL MODELS

FEDERAL, PROVINCIAL, AND MUNICIPAL TAX RATES

	<u>1981</u>	<u>1982</u>	<u>1984</u>	<u>1984</u>	<u>1985</u>
<u>Wage Deductions</u>					
Unemployment Insurance - Rate (%)	2.52	2.31	3.22	3.22	3.29
Canada Pension Plan - Rate (%)	1.80	1.80	1.80	1.80	1.80
Workers' Compensation - Rate (%)*	0.75	1.00	1.35	1.35	1.35
Provincial Payroll Tax (%)	1.50	1.50	1.50	1.50	1.50
PHIP (% of Premium Paid by Firm)	50.00	50.00	50.00	50.00	50.00
Unemployment Insurance - Income Ceiling (\$000)	16,300	18,200	20,020	22,100	23,920
Canadian Pension Plan - Income Ceiling (\$000)	13,300	14,900	16,700	18,000	21,100
Worker's Compensation - Income Ceiling (\$000)	18,000	23,200	25,700	27,500	29,400
Provincial Payroll Tax (\$000)	200,000	200,000	200,000	200,000	200,000
<u>New Brunswick Property Tax Rates</u>					
	Dollars Per \$Hundred of Assessed Value				
Provincial	3.00	3.00	2.25	2.25	2.25
Municipal	0.8971	1.0045	1.6068	1.6758	1.8425
<u>New Brunswick Corporate Income Tax Data</u>					
Proportion of Provincial Income Which is Taxable	78.40%	78.70%	67.40%	59.90%	59.90%
Corporate Capital Tax (%)	0.30	0.30	0.30	0.30	0.30
Corporate Income Tax < \$200,000 (%)**	9.00	9.00	9.00	0.00	9.00
Corporate Income Tax > \$200,000 (%)	14.00	14.00	14.00	15.00	15.00
<u>Federal Tax Rates (%)</u>					
Federal Tax Payable	46.00	46.00	46.00	46.00	46.00
Federal Tax Abatement	10.00	10.00	10.00	10.00	10.00
Federal Tax Manufacturing Abatement	6.00	6.00	6.00	6.00	6.00
Federal Surtax Payable	5.00	5.00	2.50	0.00	2.50
<u>Provincial Energy Tax Rates (%)</u>					
Gasoline - Taxable	16	16	20	20	20
Diesel Oil - Taxable	23	23	23	23	23
<u>Federal Energy Tax Rates (%)</u>					
Gasoline - Taxable	10	10	10	10	10
Diesel Oil - Taxable	12	12	12	12	12
Sales Tax Rates (%)	8	8	10	10	11

*Workers' Compensation rates vary from firm to firm.

**The 9 percent corporate tax rate applies only to Canadian controlled private corporations.

EXHIBIT II
FINANCIAL MODELS - TAX LEVERS
(0 Implies Not Taxed - 1 Implies taxed)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
<u>Provincial Base Packages:</u>					
Sales Tax Exemption	0	0	0	0	0
Corporate Capital Tax Exemption	1	1	1	1	1
Corporate Income Tax (10 Year Holiday)	0	0	0	0	0
Property Tax Relief	0	0	0	0	0
Business Taxes, Permits Etc., Waived	1	1	1	1	1
Provincial Payroll Tax	0	0	0	0	0
Provincial Health Insurance Plan	0	0	0	0	0
<u>Provincial Energy Tax Rates:</u>					
Gasoline - Taxable	1	1	1	1	1
Gasoline - Non-Taxable	0	0	0	0	0
Diesel Oil - Taxable	1	1	1	1	1
Diesel Oil - Non-Taxable	0	0	0	0	0
Heating Oil	0	0	0	0	0
Electricity	0	0	0	0	0
<u>Federal Base Package:</u>					
Customs Duty Exempt on Exports	0	0	0	0	0
Excise Tax Exemption	0	0	0	0	0
Corporate Income Tax (10 Yr. Holiday)	0	0	0	0	0
Federal Sales Tax Exemption	0	0	0	0	0
<u>Federal Tax Rates:</u>					
Gasoline - Taxable	1	1	1	1	1
Gasoline - Non-Taxable	0	0	0	0	0
Diesel Oil - Taxable	1	1	1	1	1
Diesel Oil - Non-Taxable	0	0	0	0	0
Heating Oil	0	0	0	0	0
Electricity	0	0	0	0	0
<u>Government Incentives:</u>					
Government Land Lease Incentive	0	0	0	0	0
Government Building Lease Incentive	0	0	0	0	0
Government Low Interest Capital Loan	0	0	0	0	0
Government Labour Cost Incentive	0	0	0	0	0
Government Grant	0	0	0	0	0
<u>Other Tax Impacts:</u>					
Investment Tax Credits	1	1	1	1	1
<u>SCALAR FACTORS:</u>					
<u>INFLATION/INTEREST RATES</u>					
Inflation Rate	10.00	11.00	5.50	4.50	4.00
Prime Interest Rate	13.00	13.00	11.00	11.50	10.20

EXHIBIT III
BASE CASE
FINANCIAL MODELS
SUMMARY OF TAX PAID

BASE CASE - 002
TAX SUMMARY (Millions of Dollars)

FEDERAL

Income Related
 Calculated Income Taxes
Volume Related
 UIC
 CPP
 Federal Sales Tax
 Custom Duties
 Excise Taxes
 Federal Fuel Taxes

 Total Volume Related

Total Federal Taxes

PROVINCIAL

Income Related
 Calculated Income Taxes
Volume Related
 WCB
 Provincial Health Insurance Plan
 Provincial Payroll Tax
 Provincial Sales Tax
 Provincial Gasoline Tax
 Provincial Sales Taxes - Telephone

 Total Volume Related

Fixed
 Corporate Capital Tax
 Property Tax
 Permits, Licenses etc.

 Total Fixed

Total Provincial Taxes

Total Federal & Provincial Taxes

IMPUTED PRE-TAX VALUE OF NON-TAX INCENTIVES

Land Incentive
Building Incentive
Low Interest Loan
Labour Incentive

TOTAL TAXES + NON-TAX INCENTIVES

Province; conversely, if a tax lever is set at 0 then the tax is assumed not to apply. The base case (i.e., New Brunswick's current tax system) is represented by the tax levers shown in Exhibit II.

Exhibit III presents the information obtained when the tax levers in Exhibit II are combined with the tax rates in Exhibit I and applied to the data collected via the questionnaire (Appendix I). The information contained in Exhibit III will vary, depending on the choice of tax levers set to 1. For instance, to test the impact of a 1.5 percent payroll tax on a particular company, the tax lever for the payroll tax in Exhibit II would have to be set to 1. For the base case, the tax lever is set at 0 which indicates that there is no payroll tax in New Brunswick at present.

In addition to the tax levers contained in Exhibit II there is another way to adjust the base case. Specific exemptions (additions to or removal of) under the sales tax are handled in the detailed information portion of the model. A detailed breakdown of taxable and non-taxable expenditures was collected for each firm. To introduce some exemptions, it would be necessary to enter the actual data module for each firm and reclassify taxable items as non-taxable.

IV. TAX OPTIONS TESTED

With the current tax system as the base case, the CLCG model is designed to assess the impact of a given tax change on total taxes paid by a firm. While any tax change can be tested, time constraints limited the number of options tested. The following options were tested:

- 1) Corporate Capital Tax at 3/10 of 1 percent.
- 2) Payroll Tax at 1.5 percent.
- 3) Health Insurance Premiums at Ontario rates (assumed to be paid 50% by firms).
- 4) Sales Tax expanded to include electricity and fuel oil.
- 5) Property Tax rate on commercial property increased to \$3.00 per \$100 of assessment from \$2.25 per \$100 for the 1983 to 1985 period.
- 6) Reduce Sales Tax rate to 9 percent from 11 percent for 1985.
- 7) Reduce the standard Corporate Income Tax rate to 14 percent from 15 percent.
- 8) With the Corporate Income Tax rate at 14 percent and Sales Tax rate at 9 percent, introduce a Capital Tax of 0.3 percent and a Payroll Tax of 1.5 percent.

- 9) With the Corporate Income Tax rate at 14 percent and Sales Tax at 9 percent, introduce a Capital Tax of 0.1 percent and a Payroll Tax of 0.5 percent.
- 10) Finally, with the Corporate Income Tax rate at 15 percent and the Sales Tax at 11 percent, introduce a Capital Tax of 0.1 percent and a Payroll Tax of 0.5 percent.

These options are not intended to represent an exhaustive list of possible tax changes. They are provided for illustrative purposes only. The usefulness of the options tested comes from the information they provide as an input into a logical approach to testing potential options, as identified in the theoretical review of the Province's tax system. This theoretical review is being conducted by the Institute for Research on Public Policy, and the model results will serve as an input into their analysis.

V. THE RESULTS

The results of the simulations tested on the models will be discussed for each firm. As indicated earlier, the results have been standardized to ensure confidentiality and to allow for a better comparison among the firms. For comparison purposes, the total tax paid by each firm was prorated to \$1 million. All tax changes are expressed as if the company paid a total of \$1 million in taxes. For example, if a firm paid \$2.5 million in total taxes in 1985 and a new tax measure resulted in an increase in tax liability of \$50,000, the standardized table would indicate total taxes of \$1 million and a tax change of \$20,000.

Each summary table presents information for the 1983 to 1985 period. It should be noted that a zero in any of these tables does not indicate that there are no data for that item; it merely indicates that there was no impact due to a tax change. This could be for two reasons. First, the tax change tested may be effective for only part of the 1983-1985 period. The second reason for a zero is that a particular tax change may not have any effect on all other taxes. For instance, reducing the standard provincial corporate income tax rate from 15% to 14% does not affect the federal tax payable. Therefore, zeros appear in the federal tax row for that tax change.

The summary tables must be used with care. While they are instrumental in protecting the confidentiality of the individual data provided by the firms, they often gloss over important facts which may be extremely important if the summary tables are to be used to draw conclusions regarding the impact of tax changes. For example, for one reason or another, it is often the case that a firm does not pay corporate income tax, either provincially or federally, for a given year. Since most of the tax changes contemplated wind up as deductions against corporate income tax, if a firm pays corporate tax in a given year, the net impact of a given tax change is considerably lower than if a firm does not pay corporate income tax. For this reason, both the gross revenue effects and the net revenue effects of each tax change are shown for each simulation.

The effects of tax changes will be discussed for 1985 unless there is insufficient data, in which case an alternative year will be chosen. The discussion focuses on the net impact of tax changes on the Province's finances and on the net tax liability of the participating firms.

Food and Beverage Industry

Three firms from the food and beverage industry were modelled. These firms are distinctly different and vary considerably in size and product lines.

FIRM A - FOOD AND BEVERAGE INDUSTRY

Base Case

As shown in Table 1, provincial taxes accounted for precisely one-third of total taxes in 1985. This ratio fluctuates from a low of 28.4% in 1984 to a high of 37.7% in 1983. This firm paid corporate income tax at both the federal and provincial levels over the entire 1981 to 1985 period. In terms of actual taxes paid, the single largest tax liability for this firm over the 1981-1985 period came from the federal corporate income tax. This accounted for 46.7% of the total taxes paid in 1985, or over 70% of the federal taxes paid that year. The second largest tax liability incurred in 1985 by this firm originated from the provincial sales tax which accounted for 18% of total taxes and 54% of taxes paid to the Province. This compares with the provincial corporate income tax which accounted for only 26.8% of provincial taxes and under 9% of total federal and provincial taxes.

TABLE 1
FIRM A - FOOD AND BEVERAGE INDUSTRY
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	377,447	283,696	333,416
FEDERAL TAXES	622,553	716,304	666,584
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	14,093	11,477	11,146
Federal Tax	(4,334)	(3,531)	(3,428)
Provincial Tax	(629)	(883)	(829)
Net Provincial Tax	13,464	10,594	10,317
Total Tax	9,130	7,063	6,889
2. Payroll Tax	15,270	12,109	10,699
Federal Tax	(3,992)	(3,088)	(2,797)
Provincial Tax	(579)	(766)	(677)
Net Provincial Tax	14,691	11,343	10,022
Total Tax	10,699	8,255	7,225
3. Health Insurance Premiums	36,263	28,660	25,316
Federal Tax	(10,612)	(8,181)	(7,407)
Provincial Tax	(1,540)	(2,029)	(1,792)
Net Provincial Tax	34,723	26,631	23,524
Total Tax	24,111	18,450	16,117
4. Sales Tax on Electricity and Fuel Oil	19,628	15,786	15,587
Federal Tax	(5,547)	(4,367)	(4,421)
Provincial Tax	(805)	(1,083)	(1,070)
Net Provincial Tax	18,823	14,703	14,517
Total Tax	13,276	10,336	10,096
5. Property Tax Rate to \$3/\$100	7,539	5,879	4,984
Federal Tax	(2,318)	(1,764)	(1,533)
Provincial Tax	(337)	(437)	(371)
Net Provincial Tax	7,202	5,442	4,613
Total Tax	4,884	3,678	3,080
C. ADJUST SALES TAX TO 9%			
Federal Tax	(42,428)	(33,666)	(31,817)
Provincial Tax	6,992	5,548	5,243
Provincial Sales Tax (Telephone)	1,373	1,089	1,029
Net Provincial Tax	(1,284)	(1,019)	(963)
Total Tax	(42,339)	(33,596)	(31,750)
Total Tax	(35,347)	(28,048)	(26,508)
D. ADJUST CORPORATE TAX RATE TO 14%			
Federal Tax	0	0	0
Provincial Tax	0	(2,290)	(2,993)
Total Tax	0	(2,290)	(2,993)
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	14,093	11,477	11,146
Sales Tax	(42,428)	(33,666)	(31,817)
Federal Tax	2,658	2,016	1,815
Provincial Tax	744	(2,084)	(2,793)
Provincial Sales Tax (Telephone)	(1,284)	(1,019)	(963)
Net Provincial Tax	(28,875)	(25,292)	(24,427)
Total Tax	(26,217)	(23,276)	(22,612)
2. Payroll Tax at 0.5%	5,090	4,036	3,566
Capital Tax at 0.1%	4,698	3,826	3,715
Federal Tax	4,216	3,371	3,168
Provincial Tax	970	(1,741)	(2,466)
Provincial Sales Tax	(43,712)	(34,685)	(32,780)
Net Provincial Tax	(32,954)	(28,564)	(27,965)
Total Tax	(28,738)	(25,193)	(24,797)
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	5,090	4,036	3,566
Capital Tax at 0.1%	4,698	3,826	3,715
Federal Tax	(2,775)	(2,177)	(2,075)
Provincial Tax	(483)	(540)	(502)
Net Provincial Tax	9,305	7,322	6,780
Total Tax	6,530	5,145	4,705

NOTE: Totals may not add exactly because of rounding.

Introduction of a Corporate Capital Tax at 0.3%

Based on the standardized model where total taxes owing are set at \$1,000,000 the introduction of the corporate capital tax of 0.3% would extract gross revenues of roughly \$11,146 from this firm in 1985. Since, in the base case, this firm paid both federal and provincial corporate income taxes, the net impact of the introduction of the capital tax is significantly lower. In fact, the firm's total tax liability would increase by only \$6,889. It would save \$3,428 in federal corporate income tax payments and an additional \$829 in provincial taxes. The net revenue increase for the Province would be \$10,317, with roughly 33% funded by the federal government via reduced corporate income taxes for the firm. A similar situation is evident for this firm in each year studied.

Introduction of a 1.5%

A 1.5% payroll tax would create a gross tax liability of \$10,699 and net tax increase (after deducting this tax for income tax purposes) of \$7,225 for every \$1,000,000 in taxes paid by the firm. The net increase in provincial revenues resulting from the payroll tax is \$10,022 from this firm; however, the firm would save \$2,797 in federal income tax. Therefore, the payroll tax would, in effect, be partially paid by the federal government (27.9%) via the reduced corporate income tax liability.

Introduction of a Health Insurance Premium

For the purposes of testing the model's results, a health insurance premium at Ontario rates was assumed to apply, with 50% of the premiums paid by the employer as fringe benefits. This ratio would vary from firm to firm and from industry to industry, and is offered for illustrative purposes only.

For this particular firm, the introduction of health insurance premiums (assuming it eventually pays 50% of the tax) is the most burdensome tax change tested. In 1985, this measure would increase gross taxes by \$25,316 per million of total taxes paid. The net revenue gain to the Province would be \$23,524 while the net tax increase to the firm would be \$16,117 because federal corporate income taxes would be reduced by \$7,407. The federal government would, in effect, finance almost 31.5% of the net increase in revenues to the Province.

Extending the 11% Sales Tax to Electricity and Fuel Oil

For this firm, taxing fuel oil and electricity represents the second largest tax increase tested. The gross tax increase would be in the order of \$15,500. The net tax impact on the firm would be \$10,096 while the provincial government would receive an additional \$14,500.

Increasing the Non-Residential Property Tax Rate From 2.25% to 3.00%

For this firm, such a property tax increase is the least expensive of the tax increases tested. The gross tax increase would be \$4,984 while the net increase in taxes to the firm would be \$3,081. The Province would see a tax increase of \$4,613.

Reducing the Sales Tax Rate From 11% to 9%

For Firm A, this measure is by far the single most generous reduction in taxes tested. The gross tax reduction to the firm would be \$32,780. Since expenses would be reduced by this amount, the firm would see an income tax increase of \$5,243 federally and \$1,029 provincially. The net tax decrease for the firm would be \$26,507. However, the Province would see a tax reduction of \$31,750. For this firm, reducing the sales tax to 9% would more than offset any of the tax changes tested by the model.

Reducing the Corporate Income Tax Rate to 14% from 15%

This measure would reduce the tax liability of Firm A by \$2,933 per million dollars of tax paid. The reduction in revenues to the Province from this firm would also be \$2,933. There would be no reduction in federal taxes.

Combination of a Reduced Sales Tax (9%), a Lower Corporate Income Tax Rate (14%), and a Capital Tax of 0.3%

As indicated earlier, a capital tax of 0.3% would yield \$11,146 per million dollars of total taxation. The sales tax loss would be \$32,780 (sales tax plus provincial sales tax on telephones), and the provincial income tax loss would be \$2,793. The combined net tax change for the firm would be a loss in the order of \$22,611 per million dollars of taxation. The combined revenue loss to the government would be \$24,426. The results indicate the importance of sales tax on the inputs of this firm.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%), a Payroll Tax of 0.5% and a Capital Tax of 0.1%

This combination verifies the importance of the sales tax reduction on the inputs of this firm. The net tax reduction to the firm is \$24,796. The sales tax reduction is worth \$32,780 and is partially offset by a \$3,566 tax increase for the payroll tax and a \$3,715 tax increase associated with the capital tax. The net tax loss to the Province is \$27,964 which is only slightly more than the net tax loss for the firm.

Introducing a Payroll Tax at 0.5% and a Capital Tax at 0.1%

The payroll tax would extract \$3,566 from the firm and the capital tax \$3,715. At the provincial level, this is reduced by a corporate income tax reduction of \$502, for a net tax increase to the Province of \$6,780. However, the firm's tax increase is reduced by a further \$2,075 via a reduction in federal corporate income tax payable. Thus, the firm's net tax increase is only \$4,705.

FIRM B - FOOD AND BEVERAGE INDUSTRY

Base Case

Provincial taxes accounted for between 37% and 45% of total taxes over the 1981 to 1985 period. For analysis purposes, 1985 should not be used, since, in that year, this firm did not pay corporate income tax, either provincially or federally. Therefore, 1984 will be used for purposes of analysis. In 1984, provincial taxes represented 45.3% of the total taxes paid by this firm. In terms of actual taxes paid, the single largest government sector liability for this firm over the 1981 to 1985 period was unemployment insurance premiums, except in 1982, when it was federal corporate income taxes. In 1984 (the year chosen for analysis), the UIC premiums accounted for 22.5% of all taxes paid and over 41.2% of total federal taxes paid. The second largest tax liability in 1984 for this firm was the federal sales tax which accounted for 12.8% of total taxes and 23.5% of federal taxes. The single most important provincial tax was the retail sales tax which accounted for 12.1% of total taxes. The second and third most important provincial government sector charges were the Workers' Compensation Board premiums and the provincial corporate income tax which accounted for 9.9% and 9.7% of total taxes paid, respectively.

Introduction of a Corporate Capital Tax at 0.3%

Based on the standardized model (i.e., total taxes paid equals \$1,000,000) the introduction of a 3/10 of 1 percent capital tax would extract gross revenues of \$22,561 from this

TABLE 2
FIRM B - FOOD AND BEVERAGE INDUSTRY
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	385,776	453,532	424,242
FEDERAL TAXES	614,224	546,469	575,758
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	19,420	22,561	26,648
Federal Tax	(5,972)	(6,769)	0
Provincial Tax	(1,832)	(2,027)	0
Net Provincial Tax	17,588	20,535	26,648
Total Tax	11,616	13,765	26,648
2. Payroll Tax	111,836	109,796	142,619
Federal Tax	(34,390)	(32,939)	0
Provincial Tax	(10,553)	(9,865)	0
Net Provincial Tax	101,283	99,931	142,619
Total Tax	66,894	66,992	142,619
3. Health Insurance Premiums	153,347	149,337	187,434
Federal Tax	(47,153)	(44,801)	0
Provincial Tax	(14,471)	(13,418)	0
Net Provincial Tax	138,876	135,919	187,434
Total Tax	91,723	91,119	187,434
4. Sales Tax on Electricity and Fuel Oil	65,443	59,866	75,576
Federal Tax	(20,124)	(17,960)	0
Provincial Tax	(6,176)	(5,379)	0
Net Provincial Tax	59,266	54,487	75,576
Total Tax	39,143	36,527	75,576
5. Property Tax Rate to \$3/\$100	17,260	15,032	21,590
Federal Tax	(5,306)	(4,509)	0
Provincial Tax	(1,630)	(1,350)	0
Net Provincial Tax	15,631	13,682	21,590
Total Tax	10,324	9,173	21,590
C. ADJUST SALES TAX TO 9%			
Federal Tax	(15,318)	(14,800)	(17,589)
Provincial Tax	2	2	2
Provincial Sales Tax (Telephone)	(5,396)	(5,213)	(6,195)
Net Provincial Tax	(20,712)	(20,011)	(23,781)
Total Tax	(20,710)	(20,009)	(23,779)
D. ADJUST CORPORATE TAX RATE TO 14%			
Federal Tax	0	0	0
Provincial Tax	0	(2,778)	0
Total Tax	0	(2,778)	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	19,420	22,561	26,648
Sales Tax	(15,318)	(14,800)	(17,589)
Federal Tax	(5,970)	(6,767)	2
Provincial Tax	(1,830)	(4,802)	2
Provincial Sales Tax (Telephone)	(5,396)	(5,213)	(6,195)
Net Provincial Tax	(3,124)	(2,254)	2,867
Total Tax	(9,094)	(9,022)	2,869
2. Payroll Tax at 0.5%	37,279	36,598	47,540
Capital Tax at 0.1%	6,473	7,520	8,883
Federal Tax	(13,452)	(13,234)	2
Provincial Tax	(4,127)	(6,739)	2
Provincial Sales Tax	(20,714)	(20,013)	(23,784)
Net Provincial Tax	18,911	17,366	32,641
Total Tax	5,459	4,132	32,643
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	37,279	36,598	47,540
Capital Tax at 0.1%	6,473	7,520	8,883
Federal Tax	(13,454)	(13,236)	0
Provincial Tax	(4,129)	(3,964)	0
Net Provincial Tax	39,623	40,155	56,422
Total Tax	26,168	26,919	56,422

NOTE: Totals may not add exactly because of rounding.

firm in 1984. Since, in 1984, this firm paid both federal and provincial corporate income taxes, and given that corporate capital taxes are treated as a production expense, the net impact on the firm is only \$13,765. The Province, however, would realize a tax increase of \$20,535. This dichotomy between the tax increase to the firm and the revenue increase to the Province is explained by the \$6,769 tax decrease to the firm via the federal corporate income tax.

Introduction of a 1.5% Payroll Tax

For this firm, the introduction of a 1.5% payroll tax represents the second most dramatic tax increase tested. This indicates that this firm may have a labour intensive production process. The payroll tax would create a gross tax liability of \$109,796 and a tax increase to the firm of \$66,992 for every \$1,000,000 in taxes the firm currently pays. The increase in provincial revenues would be \$99,931. However, from this, the firm would save an additional \$32,939 in federal income taxes. For this firm, the federal government effectively pays 33% of the net tax increase to the Province.

In terms of provincial taxes, if the payroll tax were introduced it would become the second most important provincial tax, only slightly smaller than the sales tax.

Introduction of a Health Insurance Premium

To analyze the impact of a health insurance premium, Ontario's rates were chosen and it was assumed that 50% of the premiums were paid by the employer as fringe benefits.

For this firm, such a payroll tax would be the most burdensome tax increase tested. In fact, if it were implemented, it would represent the single largest provincial tax liability faced by this firm.

In 1984, this measure would increase the firm's net tax liability by \$91,119 and would increase the Province's taxes from this firm by \$135,919. This is accomplished by a reduction in federal corporate income tax of almost 33% of the net tax increase to the Province, or \$44,801.

Extending the 11% Sales Tax to Electricity and Fuel Oil

For this firm, taxing electricity and fuel oil represents the third largest tax increase tested. The gross tax increase would be \$59,866, while the net increase to the firm would be \$36,527, and the tax increase to the Province \$54,487.

Increasing the Non-Residential Property Tax Rate From \$2.25 to \$3.00 per \$100 of Assessment

This represents a relatively modest tax increase for Firm B. The gross tax increase would be \$15,032 and the net increase for the firm would be \$9,173. The Province would receive an additional \$13,682 in revenues per \$1,000,000 in total tax paid.

Reducing the Sales Tax Rate from 11% to 9%

The effects of lowering the sales tax rate to 9% are far less evident for this firm than for Firm A. The final value of the sales tax reduction to the firm is \$20,009, and for the Province, \$20,011.

Reducing the Corporate Income Tax Rate to 14% from 15%

The impact of this measure is identical for the firm and the Province; both would see a tax reduction of \$2,778 per \$1,000,000 in taxes paid by the firm.

Combination of a Lower Sales Tax Rate (9%), a Lower CIT Rate (14%) and a Capital Tax of 0.3%

The net impact of these three measures would be to reduce the tax liability of the firm by \$9,022. However, since the firm's profit position would be improved, the Province's tax loss would be only \$2,254.

Combination of a Lower Sales Tax Rate (9%), a Lower CIT Rate (14%), a Capital Tax of (0.1%) and a Payroll Tax of 0.5%

Unlike Firm A, this firm faces a tax increase due to this combination. This is primarily the result of the heavy burden which a payroll tax places on this firm. The net tax increase for this combination for Firm B is \$4,132, while the Province would receive an additional \$17,366.

Introducing a Payroll Tax of 0.5% and a Capital Tax of 0.1%

Again, because of the heavy burden of the payroll tax on Firm B, this combination represents a substantial tax increase. The payroll tax would exact \$36,598 and the capital tax \$7,520. This indicates the labour intensive nature of this firm. The net tax increase for the firm would be \$26,919, while the Province would receive \$40,155. This difference is funded by the federal government via a \$13,236 reduction in federal corporate income tax liabilities.

FIRM C - FOOD AND BEVERAGE INDUSTRY

Base Case

As shown in Table 3, provincial taxes account for 37.4% of total taxes paid in 1985. This is considerably less than the 45.4% accounted for by provincial taxes in 1983. Firm C paid corporate income tax at both the federal and provincial level in 1985 and 1983, however, in 1984 it paid only provincial income taxes.

Introduction of a 0.3% Corporate Capital Tax

This tax change would result in a gross tax liability of \$28,764 per \$1,000,000 in total taxes paid. This was partially offset by a \$3,399 federal income tax reduction and a \$1,064 provincial income tax reduction. These reductions resulted from the fact that the firm's taxable income was reduced by the amount of the capital tax. The net tax increase to the firm is \$24,301. The Province would receive an additional \$27,700 which is partially funded by the federal income tax reduction for the firm.

TABLE 3
FIRM C - FOOD AND BEVERAGE INDUSTRY
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	453,632	404,237	374,183
FEDERAL TAXES	546,368	595,763	625,817
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	26,579	42,468	28,764
Federal Tax	(8,173)	0	(3,399)
Provincial Tax	(2,754)	(4,714)	(1,064)
Net Provincial Tax	23,825	37,754	27,700
Total Tax	15,652	37,754	24,301
2. Payroll Tax	46,038	81,825	51,080
Federal Tax	(14,000)	0	(6,400)
Provincial Tax	(5,000)	(9,000)	(2,000)
Net Provincial Tax	41,038	72,825	49,080
Total Tax	27,038	72,825	42,680
3. Health Insurance Premiums	26,522	49,240	30,423
Federal Tax	(8,000)	0	(3,800)
Provincial Tax	(3,000)	(5,000)	(1,000)
Net Provincial Tax	23,522	44,240	29,423
Total Tax	15,522	44,240	25,623
4. Sales Tax on Electricity and Fuel Oil	40,310	71,293	47,753
Federal Tax	(12,395)	0	(5,689)
Provincial Tax	(4,176)	(7,914)	(1,767)
Net Provincial Tax	36,134	63,379	45,986
Total Tax	23,739	63,379	40,297
5. Property Tax Rate to \$3/\$100	9,766	16,257	10,653
Federal Tax	(3,003)	0	(1,290)
Provincial Tax	(1,012)	(1,805)	(394)
Net Provincial Tax	8,755	14,452	10,259
Total Tax	5,751	14,452	8,969
C. ADJUST SALES TAX TO 9%	(15,784)	(28,482)	(15,581)
Federal Tax	5,108	9,217	5,042
Provincial Tax	610	1,101	602
Provincial Sales Tax (Telephone)	(1,176)	(2,121)	(1,160)
Net Provincial Tax	(16,350)	(29,503)	(16,139)
Total Tax	(11,242)	(20,286)	(11,097)
D. ADJUST CORPORATE TAX RATE TO 14%			
Federal Tax	0	0	0
Provincial Tax	0	0	0
Total Tax	0	0	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	26,579	42,468	28,764
Sales Tax	(15,784)	(28,482)	(15,581)
Federal Tax	(3,065)	9,217	(2,895)
Provincial Tax	(2,144)	(3,613)	(462)
Provincial Sales Tax (Telephone)	(1,176)	(2,121)	(1,160)
Net Provincial Tax	7,475	8,252	11,561
Total Tax	4,410	17,469	8,666
2. Payroll Tax at 0.5%	15,346	27,275	17,027
Capital Tax at 0.1%	8,860	14,156	9,588
Federal Tax	2,379	9,217	(6,309)
Provincial Tax	(309)	(473)	(247)
Provincial Sales Tax	(16,960)	(30,603)	(16,741)
Net Provincial Tax	6,936	10,354	9,627
Total Tax	9,315	19,571	3,318
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	15,346	27,275	17,027
Capital Tax at 0.1%	8,860	14,156	9,588
Federal Tax	(2,729)	0	(11,351)
Provincial Tax	(919)	(1,574)	(355)
Net Provincial Tax	23,286	39,857	26,259
Total Tax	20,557	39,857	14,908

NOTE: Totals may not add exactly because of rounding.

Introduction of a 1.5% Payroll Tax

For Firm C, a 1.5% payroll tax represents the largest tax increase tested. The gross tax increase is \$51,080 which is reduced by income tax savings of \$6,400 federally and \$2,000 provincially. The net tax increase to the firm is \$42,680 while the Province would receive an additional \$49,080.

Introduction of Health Insurance Premiums

Health insurance premiums at Ontario rates which are 50% paid by the employer would cost Firm C \$30,423. The firm's federal income tax liability would be reduced by \$3,800, and its provincial income tax liability would fall by \$1,000. The net tax increase to the firm would be \$25,623 in 1985. The tax increase to the Province would be \$29,423.

Extending the Sales Tax to Electricity and Fuel Oil

This measure represents the second largest tax increase to the firm, resulting from the tax changes tested. Firm C's gross tax liability would increase by \$47,753. Its federal income tax payment would be reduced by \$5,689, while its provincial income taxes would drop by \$1,767. This results in a net tax increase to the firm of \$40,297. The net tax increase for the Province would be \$45,986.

Increasing the Non-Residential Property Tax Rate from 2.25% to 3.00%

This tax measure has a relatively modest impact on Firm C. The gross increase is only \$10,653. From this gross tax increase, \$1,290 can be deducted from federal income taxes and \$394 from provincial income taxes, bringing the net tax increase to \$8,969 per \$1,000,000 of total taxes paid. The net tax increase to the Province is \$10,259.

Reducing the Sales Tax Rate from 11% to 9%

In 1985, the sales tax reduction would save this firm \$16,741 in total. The net tax reduction for the firm is \$11,097 and for the Province \$16,139. This firm would pay an additional \$5,042 in federal income taxes and \$602 in provincial income taxes.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%) and a 0.3% Capital Tax

Effectively, this is a test of the combined impact of a sales tax reduction and the introduction of a 0.3% capital tax. This results from the fact that Firm C currently has an effective tax rate of less than 14%. Therefore, reducing the statutory rate to 14% has no effect on the firm's taxable position. The 0.3% capital tax results in a gross tax increase of \$28,764 while the sales tax reduction will reduce the firm's gross taxes by \$16,741. Combined, these changes result in a \$2,895 reduction in federal income tax and \$462 in provincial income tax. The net tax increase to the firm is \$8,666, while the Province would receive an additional \$11,561.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%), a 0.5% Payroll Tax and a 0.1% Capital Tax

Since this firm's effective corporate income tax rate is less than 14%, reducing the statutory tax rate to 14% has no impact. Therefore, this is effectively a test of reducing the sales tax rate and introducing a capital tax and a payroll tax. The 0.5% payroll tax yields gross revenue from this firm of \$17,027 per \$1,000,000 in total taxes paid. The 0.1% capital tax generates \$9,588 in gross revenues. The sales tax reduction would save the firm \$16,741. The firm saves \$6,309 in federal income tax and \$247 in provincial income taxes. The net tax increase for the firm is \$3,318 while the Province would receive an additional \$9,627 in taxes.

Combination of a 0.5% Payroll Tax and a 0.1% Capital Tax

The combined gross tax increase resulting from the introduction of a 0.5% payroll tax and a 0.1% capital tax is \$26,615. The firm would save \$11,351 in federal income taxes and \$355 in provincial income taxes. The net tax increase to the firm is \$14,908 while the net tax increase to the Province is \$26,259 per \$1,000,000 of total taxes paid. This dichotomy is brought about by the fact that the firm saves \$11,351 in federal income taxes due to the introduction of the payroll and capital taxes.

Firm D - Service Sector

One firm in the service sector was modelled. It is the single largest firm in terms of taxes paid among the participating firms.

Base Case

Provincial taxes accounted for between 50% and 57.5% of total taxes paid by this firm over the 1981 to 1985 period. This firm paid corporate income tax at both the federal and provincial levels over the entire period. However, despite being a large firm, the effective provincial tax rate was well below the statutory rate of 15% over the entire period. For that reason, testing a corporate tax reduction from 15% to 14% has no impact on this firm.

In terms of actual taxes paid, the single largest tax liability for this firm is the federal corporate income tax. This accounted for 36% of total taxes paid and over 72% of federal taxes paid. The second largest tax liability for this firm over the 1981-1985 period came from the provincial property tax. This is primarily due to its large property holdings relative to its size. In fact, the property tax represents 28% of total taxes and 56.7% of provincial taxes paid.

TABLE 4
FIRM D - SERVICE INDUSTRY
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	505,654	515,731	501,765
FEDERAL TAXES	494,346	484,269	498,235
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	24,893	23,546	35,001
Federal Tax	(7,654)	(7,064)	(10,763)
Provincial Tax	(3,485)	(3,532)	(1,750)
Net Provincial Tax	21,408	20,014	33,251
Total Tax	13,753	12,950	22,488
2. Payroll Tax	9,314	9,003	11,829
Federal Tax	(2,435)	(2,296)	(3,092)
Provincial Tax	(1,109)	(1,148)	(503)
Net Provincial Tax	8,206	7,855	11,326
Total Tax	5,771	5,559	8,234
3. Health Insurance Premiums	17,070	15,953	20,881
Federal Tax	(4,925)	(4,492)	(6,042)
Provincial Tax	(2,242)	(2,246)	(982)
Net Provincial Tax	14,828	13,707	19,898
Total Tax	9,903	9,215	13,857
4. Sales Tax on Electricity and Fuel Oil	4,009	4,031	6,211
Federal Tax	(1,149)	(1,128)	(1,781)
Provincial Tax	(523)	(564)	(290)
Net Provincial Tax	3,485	3,467	5,921
Total Tax	2,336	2,339	4,140
5. Property Tax Rate to \$3/\$100	40,205	41,079	52,105
Federal Tax	(12,355)	(12,324)	(16,022)
Provincial Tax	(5,625)	(6,162)	(2,605)
Net Provincial Tax	34,579	34,917	49,500
Total Tax	22,224	22,594	33,478
C. ADJUST SALES TAX TO 9%			
Federal Tax	(18,881)	(19,000)	(24,721)
Provincial Tax	1,570	1,580	2,056
Provincial Sales Tax (Telephone)	91	91	119
Net Provincial Tax	(159)	(160)	(208)
Total Tax	(18,949)	(19,068)	(24,810)
	(17,379)	(17,488)	(22,755)
D. ADJUST CORPORATE TAX RATE TO 14%			
Federal Tax	0	0	0
Provincial Tax	0	0	0
Total Tax	0	0	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	24,893	23,546	35,001
Sales Tax	(18,881)	(19,000)	(24,721)
Federal Tax	(6,084)	(5,484)	(8,707)
Provincial Tax	(3,394)	(3,441)	(1,631)
Provincial Sales Tax (Telephone)	(159)	(160)	(208)
Net Provincial Tax	2,459	946	8,441
Total Tax	(7,626)	(4,538)	(266)
2. Payroll Tax at 0.5%	3,105	3,001	3,943
Capital Tax at 0.1%	8,298	7,849	11,667
Federal Tax	(1,793)	(1,540)	(2,563)
Provincial Tax	(1,441)	(1,469)	(632)
Provincial Sales Tax	(19,040)	(19,159)	(24,929)
Net Provincial Tax	(9,078)	(9,779)	(9,951)
Total Tax	(10,871)	(11,319)	(12,514)
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	3,105	3,001	3,943
Capital Tax at 0.1%	8,298	7,849	11,667
Federal Tax	(3,363)	(3,120)	(4,618)
Provincial Tax	(1,531)	(1,560)	(751)
Net Provincial Tax	9,871	9,290	14,859
Total Tax	6,508	6,170	10,241

NOTE: Totals may not add exactly because of rounding.

Unlike the previous firms modelled, provincial sales tax on inputs is not a dominant factor in determining this firm's total tax liability.

Introduction of a Corporate Capital Tax at 0.3%

For this firm, introducing a corporate capital tax would be the second most onerous tax change tested. Only a property tax increase is more burdensome. In 1985, a 0.3% corporate capital tax would raise this firm's gross tax liability by \$35,001 per \$1,000,000 of total taxes paid. The net increase for the firm would be \$22,488. The Province would receive a net revenue increase of \$33,251, of which \$10,763 would be funded by a federal income tax decrease.

Introduction of a 1.5% Payroll Tax

A 1.5% payroll tax has a relatively light impact on Firm D, compared to the other participating firms. The gross tax increase to the firm is only \$11,829, while the net tax increase to the firm is \$8,234. The Province would receive an additional \$11,326 of which \$3,092 is indirectly financed by the federal government via reduced federal corporate income taxes.

Introduction of a Health Insurance Premium

This represents the third largest tax increase tested for Firm D. The firm's gross tax increase would be \$20,881. This would be partially offset by a corporate tax reduction of \$6,042 at the federal level and \$982 at the provincial level. Therefore, the net tax increase for the firm is \$13,857 while

the Province would receive an additional \$19,898 per \$1,000,000 in total taxes paid by the firm in the base case.

Extending the 11% Sales Tax to Electricity and Fuel Oil

For this firm, this measure has a relatively small impact, both internally and in comparison to the other firms modelled. The net tax increase to the firm is only \$4,140, while the net revenue increase for the Province is \$5,921 per million dollars of total tax paid.

Increasing the Non-Residential Property Tax Rate from 2.25% to 3.00%

For this firm, this is the single most important tax change contemplated. In fact, when the tax increase associated with this measure is added to the firm's already significant property tax payments, the property tax rivals the federal corporate income tax in terms of total taxes paid.

The gross tax increase is \$52,105 while the net tax increase to the firm is \$33,478. The net tax increase to the Province is \$49,500 per \$1,000,000 of total taxes paid.

Reducing the Sales Tax Rate from 11% to 9%

This tax reduction would generate gross tax savings for this firm of \$24,929 per \$1,000,000 of total tax paid. The net tax reduction for the firm is \$22,755 while the net tax reduction for the Province is \$24,810.

Combination of a Reduced Sales Tax (9%), a Lower Corporate Income Tax Rate (14%) and a Capital Tax of 0.3%

Since the effective provincial corporate income tax rate is less than 14% for this firm, there is no tax reduction for the firm by lowering the Province's statutory rate to 14%. This is true for the entire period modelled. Therefore, the impact indicated in Table 4, Section E1, is for a combination of a sales tax reduction and the introduction of a capital tax. Because of this firm's unique situation, this combination results in a net tax reduction for the firm of \$266 and a net tax increase to the Province of \$8,441. This is an uncharacteristic model result. It does not occur for any other firm for any of the tax changes tested.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax Rate (14%), a Payroll Tax at 0.5% and a Capital Tax at 0.1%

The results of this test are dominated by the sales tax reduction of \$24,929 experienced by the firm. The net tax loss to the Province is \$9,951 while the firm experiences a net tax decrease of \$12,514.

Introducing a Payroll Tax at 0.5% and a Capital Tax at 0.1%

The payroll tax would extract \$3,943 from the firm and the capital tax \$11,667. The firm would save \$4,618 on federal income tax and an additional \$751 provincially. This translates into a net tax increase to the firm of \$10,241 and increased revenues to the Province of \$14,859.

FIRM E - HEAVY MANUFACTURING/PROCESSING

Base Case

Table 5 indicates that provincial taxes accounted for 50.2% of total taxes paid by this firm in 1985. This represents the lowest percentage over the 1981 to 1985 period. Provincial taxes as a percentage of total taxes peaked in 1982 at 57.2%. Despite its size, (it is the second largest of the participating firms) and its relatively large total tax payout, this firm did not pay any federal corporate income taxes over the five-year period studied. Furthermore, while it did pay provincial corporate income tax over the period, the amounts were very small.

The single largest tax liability for this firm came from the provincial sales tax. In 1985, the provincial sales tax represented 78% of provincial taxes paid by this firm and 31% of its total tax liability. The second most important tax paid by this firm was the federal sales tax which accounted for 60.6% of all federal taxes and 30.2% of total taxes. Combined, the provincial and federal sales taxes account for over 60% of all taxes paid by this firm in 1985. The numbers are similar over the entire forecast period.

The relatively high percentage of total taxes accounted for by the two levels of sales tax is partially explained by the extremely low corporate income tax paid by this firm. Because this firm pays virtually no corporate income tax to either level of government, the net impact of the tax changes modelled is almost identical to the gross impact of

TABLE 5
FIRM E - HEAVY MANUFACTURING/PROCESSING
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	558,285	539,671	501,799
FEDERAL TAXES	441,715	460,329	498,201
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	116,047	97,955	78,209
Federal Tax	0	0	0
Provincial Tax	(3,068)	(2,588)	(516)
Net Provincial Tax	112,979	95,367	77,693
Total Tax	112,979	95,367	77,693
2. Payroll Tax	85,549	79,199	73,579
Federal Tax	0	0	0
Provincial Tax	(3,068)	(2,588)	(516)
Net Provincial Tax	82,481	76,611	73,063
Total Tax	82,481	76,611	73,063
3. Health Insurance Premiums	61,035	50,467	46,864
Federal Tax	0	0	0
Provincial Tax	(3,068)	(2,588)	(516)
Net Provincial Tax	57,967	47,879	46,349
Total Tax	57,967	47,879	46,349
4. Sales Tax on Electricity and Fuel Oil	110,399	92,715	77,932
Federal Tax	0	0	0
Provincial Tax	(3,068)	(2,588)	(516)
Net Provincial Tax	107,331	90,127	77,416
Total Tax	107,331	90,127	77,416
5. Property Tax Rate to \$3/\$100	26,252	21,617	18,431
Federal Tax	0	0	0
Provincial Tax	(2,374)	(2,137)	(516)
Net Provincial Tax	23,878	19,480	17,916
Total Tax	23,878	19,480	17,916
C. ADJUST SALES TAX TO 9%	(69,715)	(69,233)	(56,813)
Federal Tax	10,622	10,549	8,656
Provincial Tax	1,834	1,821	1,494
Provincial Sales Tax (Telephone)	(815)	(809)	(664)
Net Provincial Tax	(68,697)	(68,222)	(55,983)
Total Tax	(58,074)	(57,673)	(47,326)
D. ADJUST CORPORATE TAX RATE TO 14%	0	0	0
Federal Tax	0	0	0
Provincial Tax	0	0	0
Total Tax	0	0	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	116,047	97,975	78,209
Sales Tax	(69,715)	(69,233)	(56,813)
Federal Tax	10,622	10,549	8,656
Provincial Tax	(1,234)	(767)	979
Provincial Sales Tax (Telephone)	(815)	(809)	(664)
Net Provincial Tax	44,283	27,166	21,710
Total Tax	54,905	37,714	30,367
2. Payroll Tax at 0.5%	28,516	26,400	24,526
Capital Tax at 0.1%	38,682	32,658	26,070
Federal Tax	10,622	10,549	8,656
Provincial Tax	(1,234)	(767)	979
Provincial Sales Tax	(70,530)	(70,043)	(57,477)
Net Provincial Tax	(4,566)	(11,752)	(5,903)
Total Tax	6,057	(1,203)	2,754
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	28,516	26,400	24,526
Capital Tax at 0.1%	38,682	32,658	26,070
Federal Tax	0	0	0
Provincial Tax	(3,068)	(2,588)	(516)
Net Provincial Tax	64,131	56,470	50,080
Total Tax	64,131	56,470	50,080

NOTE: Totals may not add exactly because of rounding.

the tax changes. This is a critical factor if one is to attempt inter-industry comparisons of the impact of the tax changes.

Introduction of a Corporate Capital Tax at 0.3%

Based on the standardized model which sets total taxes paid at \$1,000,000, the introduction of a 0.3% corporate capital tax would extract gross revenues of \$78,209 from this firm in 1985. The net impact of this measure is \$77,693 for both the firm and the Province. This is the case because the firm paid no corporate income taxes (from which it could deduct its capital taxes) to the federal government.

It is interesting to note that, for this firm, the introduction of a capital tax is the most burdensome tax of those tested by the model. In fact, a 0.3% capital tax would represent the fifth largest government sector levy faced by this firm, behind the provincial sales tax, the federal sales tax, UIC premiums and property taxes.

Introduction of a 1.5% Payroll Tax

A 1.5% payroll tax would generate a gross tax liability for Firm E of \$73,579 per million dollars of total taxes paid. Because of the negligible income taxes paid by this firm the net tax increase for the firm would be \$73,063. This is identical to the net tax increase for the Province since no federal income tax was paid.

Introduction of a Health Insurance Premium

In order to test the impact of introducing a health insurance premium, Ontario rates were modelled. It was assumed that the firm would pay 50% of the premiums. Of course, this ratio will vary from firm to firm and industry to industry. However, for illustrative purposes, the 50% level was chosen.

This firm's gross tax liability from a health insurance premium would be \$46,864 and the net tax increase would be \$46,349.

Extending the 11% Sales Tax to Electricity and Fuel Oil

For this firm, taxing fuel oil and electricity represents the second largest tax increase tested. This measure is only marginally smaller than the increase associated with the introduction of the capital tax. The gross tax increase associated with taxing fuel oil and electricity is \$77,932 and the net tax increase is \$77,416, compared to a gross tax increase of \$78,209 and a net tax increase of \$77,693 for the capital tax.

The addition of fuel and electricity affects this firm more heavily per million dollars of taxes paid than any other except the company from the sawmilling industry.

Increasing the Non-Residential Property Tax Rate from 2.25% to 3.00%

For Firm E, increasing the property tax rate to 3.00% represents the smallest tax increase tested. The gross tax increase of this measure would be 18,431 per 1,000,000 of total taxes. The net increase in taxes would be \$17,916.

Reducing the Sales Tax From 11% to 9%

The 2% reduction in the sales tax would save this firm \$57,477. However, this saving would result in a federal corporate income tax liability of \$8,656 and a provincial income tax increase of \$1,494. Therefore, the net tax decrease for the firm would be \$47,326 while the Province would lose \$55,983 per million dollars of total taxes paid.

Reducing the Corporate Income Tax Rate to 14% from 15%

Since the effective provincial income tax rate on this firm is less than 14%, reducing the statutory corporate tax rate to 14% has no effect.

Combination of a Reduced Sales Tax (9%), a Lower CIT Rate (14%) and a 0.3% Capital Tax

As indicated above, lowering the corporate income tax rate to 14% has no impact on this firm. Therefore, this is effectively a test of the combined effect of lowering the sales tax and introducing a capital tax. For this reason, an inter-industry comparison of this particular tax change will yield misleading results.

The capital tax would increase this firm's tax liability by \$78,209 while the sales tax reduction would reduce its liability by \$57,477. Federal corporate income taxes would increase by \$8,656 and provincial income taxes by \$979. The firm's net tax increase would be \$30,367 while the Province would receive only \$21,710 of this.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%), a 0.5% Payroll Tax and a 0.1% Capital Tax

Since lowering the corporate income tax rate to 14% does not affect on this firm, this effectively is a test of the impact of a reduced sales tax and the introduction of a payroll tax and a capital tax at low rates.

The sales tax reduction is larger than the combined tax increase of the 0.5% payroll tax and the 0.1% capital tax. Therefore, the net tax change for the Province is a loss of \$5,903. However, since the tax for the firm results in a liability for federal income taxes, the firm ends up paying \$2,754 in additional taxes, all of which would go to the federal government. For this particular firm, such a combination of tax changes does not make sense from a provincial government standpoint since the benefits accrue to the federal government, not to the company.

Introducing a Payroll Tax at 0.5% and a Capital Tax at 0.1%

The payroll tax at 0.5% would extract \$24,526 from this firm and the 0.1% capital tax \$26,070. Since the firm pays no federal corporate income tax and only minimal provincial CIT, the net increase to the firm is almost exactly

equal to the sum of the two. The net increase to the firm and to the Province is \$50,080 per million dollars of taxes paid.

Fish Processing Industry

One firm from this industry was modelled. It is a relatively small company compared to the other participants. However, it is of average size for the industry it represents.

FIRM F - FISH PROCESSING INDUSTRY

Table 6 presents the effects of the tax changes tested. Provincial taxes account for between 36.5% and 47.2% over the period modelled. This firm paid provincial and federal income taxes in 1982 and 1983 only. Therefore, for comparison purposes, the 1983 impacts will be presented for this company. In 1983, provincial taxes accounted for 47.2% of the firm's total tax liability. In that year, the largest single tax liability came from the federal sales tax which accounted for 38.3% of federal taxes paid and 20.2% of total taxes paid. The second largest tax liability faced by this company is from the provincial sales tax. This tax represents 39.2% of all provincial taxes and 18.5% of total taxes. Combined, the federal and provincial sales taxes represent 38.7% of all taxes paid in 1983. This compares to the corporate income taxes which, combined, represent 29% of total taxes paid (11.2% federally and 17.8% provincially).

TABLE 6
FIRM F - HEAVY MANUFACTURING/PROCESSING
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	472,312	459,086	470,142
FEDERAL TAXES	527,688	540,914	529,858
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	25,578	32,148	24,704
Federal Tax	(7,865)	0	0
Provincial Tax	(3,581)	0	0
Net Provincial Tax	21,997	32,148	24,704
Total Tax	14,132	32,148	24,704
2. Payroll Tax	59,088	87,941	84,980
Federal Tax	(18,415)	0	0
Provincial Tax	(8,384)	0	0
Net Provincial Tax	51,504	87,941	84,980
Total Tax	33,089	87,941	84,980
Health Insurance Premiums	90,761	135,372	127,354
Federal Tax	(33,403)	0	0
Provincial Tax	(12,706)	0	0
Net Provincial Tax	78,054	135,372	127,354
Total Tax	44,652	135,372	127,354
4. Sales Tax on Electricity and Fuel Oil	23,175	32,408	35,561
Federal Tax	(7,126)	0	0
Provincial Tax	(3,245)	0	0
Net Provincial Tax	19,931	32,408	35,561
Total Tax	12,805	32,408	35,561
5. Property Tax Rate to \$3/\$100	8,025	35,008	32,878
Federal Tax	(2,468)	0	0
Provincial Tax	(1,123)	0	0
Net Provincial Tax	6,902	35,008	32,878
Total Tax	4,434	35,008	32,878
C. ADJUST SALES TAX TO 9%	(47,979)	(48,012)	(36,842)
Federal Tax	0	0	0
Provincial Tax	0	0	0
Provincial Sales Tax (Telephone)	(765)	(766)	(588)
Net Provincial Tax	(48,744)	(48,778)	(37,430)
Total Tax	(48,744)	(48,778)	(37,430)
D. ADJUST CORPORATE TAX RATE TO 14%	0	0	0
Federal Tax	0	0	0
Provincial Tax	0	0	0
Total Tax	0	0	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	25,578	32,148	24,704
Sales Tax	(47,979)	(48,012)	(36,842)
Federal Tax	(7,865)	0	0
Provincial Tax	(3,581)	0	0
Provincial Sales Tax (Telephone)	(765)	(766)	(588)
Net Provincial Tax	(26,747)	(16,630)	(12,726)
Total Tax	(34,612)	(16,630)	(12,726)
2. Payroll Tax at 0.5%	19,963	29,314	28,327
Capital Tax at 0.1%	8,526	10,716	8,235
Federal Tax	(8,761)	0	0
Provincial Tax	(3,988)	0	0
Provincial Sales Tax	(48,744)	(48,778)	(37,430)
Net Provincial Tax	(24,244)	(8,748)	(868)
Total Tax	(33,004)	(8,748)	(868)
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	19,963	29,314	28,327
Capital Tax at 0.1%	8,526	10,716	8,235
Federal Tax	(8,761)	0	0
Provincial Tax	(3,988)	0	0
Net Provincial Tax	24,501	40,030	36,561
Total Tax	15,740	40,030	36,561

NOTE: Totals may not add exactly because of rounding.

Introduction of a 0.3% Corporate Capital Tax

In 1983, the introduction of a 0.3% capital tax would cost Firm F \$25,578 in gross terms. However, since the capital tax is deductible for income tax purposes, the firm would save \$7,865 in federal income taxes and \$3,581 in provincial income taxes. Therefore, the net tax increase to the firm is \$14,132 and for the Province \$21,997.

Introduction of a 1.5% Payroll Tax

A 1.5% payroll tax would generate a gross tax liability of \$59,888 for Firm F. The net tax increase for the firm would be \$33,089, and the Province would receive \$51,504 in additional taxes. For this company this tax measure represents the second most burdensome measure tested.

Introduction of a Health Insurance Premium

The health insurance premium rates chosen are identical to Ontario rates. It was assumed that 50% of the premiums are paid by the employer as fringe benefits. While this may not be the case for this particular firm, the same assumption was made for all the firms modelled.

Introducing health insurance premiums would generate a gross tax increase of \$90,761 per \$1,000,000 in total taxes in 1983. The firm would save \$33,403 in federal income taxes and \$12,706 in provincial income taxes. This results in a net tax increase to the firm of \$44,652 and a net revenue increase to the Province of \$78,054.

The health insurance premiums represent the single largest tax increase this firm would face, given the tax changes tested by the model.

Extending the 11% Sales Tax to Electricity and Fuel Oil

This measure would result in a gross tax increase of \$23,175 per million dollars of total taxes paid. The net tax increase for the firm is \$12,805 while the Province would receive an additional \$19,931.

Increasing the Non-Residential Property Tax Rate from 2.25% to 3.00%

For this firm this measure is relatively small; only \$8,025 in gross taxes would result. Based on this increase, the firm would be able to reduce its federal corporate income tax payments by \$2,468 and its provincial corporate income taxes by \$1,123. This results in a net tax increase for the company of \$4,434 and a net revenue increase for the Province of \$6,902.

Reducing the Sales Tax Rate from 11% to 9%

Reducing the sales tax rate to 9% would save this firm \$48,744 per \$1,000,000 in total taxes.

Reduce the Corporate Tax Rate to 14% from 15%

Since the firm's effective corporate tax rate at the provincial level is already less than 14%, reducing the statutory tax rate to 14% has no impact on the firm.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax Rate (14%) and a Capital Tax of 0.3%

Since the reduction in the corporate income tax rate has no effect on this company, this combination effectively tests the impact of a reduced sales tax and a capital tax. The net tax decrease to the firm is \$34,612 while the Province would lose only \$26,747. In effect, the federal government foots \$7,865 of the firm's savings.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax Rate (14%), a 0.5% Payroll Tax and a 0.1% Capital Tax

Again, this combination represents a test of the reduced sales tax, a 0.5% payroll tax and a 0.1% capital tax. The net tax loss to the Province is \$24,244 while the firm saves \$33,004 per \$1,000,000 of total taxes paid in the base case.

Introduction of a 0.5% Payroll Tax and a 0.1% Capital Tax

A 0.5% payroll tax would generate \$19,963 in gross revenues from this firm while the 0.1% capital tax would generate \$8,526. The firm would save \$8,761 in federal income taxes and \$3,988 in provincial income taxes. This results in a net revenue increase for the Province of \$24,501 and a net tax increase for the firm of \$15,740.

FIRM G - LIGHT MANUFACTURING

Base Case

This firm did not pay any federal income tax during the 1981 to 1985 period. However, it did pay provincial income taxes in 1984 and 1985. The fact that this firm did not pay any federal income tax results in a situation where the net effects for this firm are not 100% comparable to those of other firms.

As shown in Table 7, provincial taxes accounted for 47.0% of total taxes paid in 1985, 40.1% in 1984 and 45.5% in 1983.

The single most important government charge to this firm in 1985 was unemployment insurance premiums which accounted for 23.6% of total taxes and 44.6% of federal taxes paid by the firm. The second largest tax liability came from the federal sales tax. This tax represents 30.4% of federal taxes and 16.1% of total taxes paid by this firm.

Introduction of a 0.3% Corporate Capital Tax

In 1985, the introduction of a capital tax would extract \$21,622 gross revenues from this firm. The firm would save no federal income taxes since it did not pay any, but would save \$2,432 in provincial income taxes. This results in a net effect on the company and the Province of \$19,190 per \$1,000,000 in total taxes paid in the base case.

TABLE 7
FIRM G - LIGHT MANUFACTURING
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	454,677	401,423	469,971
FEDERAL TAXES	545,323	598,577	530,029
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	57,337	19,386	21,622
Federal Tax	0	0	0
Provincial Tax	0	(3,433)	(2,432)
Net Provincial Tax	57,337	15,953	19,190
Total Tax	57,337	15,953	19,190
2. Payroll Tax	159,803	172,491	141,997
Federal Tax	0	0	0
Provincial Tax	0	(22,895)	(15,975)
Net Provincial Tax	159,803	149,597	126,023
Total Tax	159,803	149,597	126,023
Health Insurance Premiums	108,950	151,919	110,853
Federal Tax	0	0	0
Provincial Tax	0	(19,470)	(12,453)
Net Provincial Tax	108,950	132,449	98,400
Total Tax	108,950	132,449	98,400
4. Sales Tax on Electricity and Fuel 011	29,520	27,095	21,178
Federal Tax	0	0	0
Provincial Tax	0	(3,693)	(2,383)
Net Provincial Tax	29,520	23,402	18,796
Total Tax	29,520	23,402	18,796
5. Property Tax Rate to \$3/\$100	0	0	26,500
Federal Tax	0	0	0
Provincial Tax	0	0	(2,981)
Net Provincial Tax	0	0	23,519
Total Tax	0	0	23,519
C. ADJUST SALES TAX TO 9%	(15,202)	(12,830)	(9,685)
Federal Tax	0	0	0
Provincial Tax	2,109	1,780	1,344
Provincial Sales Tax (Telephone)	(6,797)	(5,736)	(4,331)
Net Provincial Tax	(19,890)	(16,786)	(12,672)
Total Tax	(19,890)	(16,786)	(12,672)
D. ADJUST CORPORATE TAX RATE TO 14%			
Federal Tax	0	0	0
Provincial Tax	0	(6,567)	(9,271)
Total Tax	0	(6,567)	(9,271)
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	57,337	19,386	21,622
Sales Tax	(15,282)	(12,830)	(9,685)
Federal Tax	0	0	0
Provincial Tax	2,109	(8,220)	(10,360)
Provincial Sales Tax (Telephone)	(6,797)	(5,736)	(4,331)
Net Provincial Tax	37,367	(7,400)	(2,754)
Total Tax	37,367	(7,400)	(2,754)
2. Payroll Tax at 0.5%	53,268	57,497	47,332
Capital Tax at 0.1%	19,112	6,462	7,207
Federal Tax	0	0	0
Provincial Tax	2,109	(13,563)	(14,063)
Provincial Sales Tax	(21,998)	(18,566)	(14,016)
Net Provincial Tax	52,490	31,830	26,461
Total Tax	52,490	31,830	26,461
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	53,268	57,497	47,332
Capital Tax at 0.1%	19,112	6,462	7,207
Federal Tax	0	0	0
Provincial Tax	0	(8,776)	(6,136)
Net Provincial Tax	72,380	55,183	48,404
Total Tax	72,380	55,183	48,404

NOTE: Totals may not add exactly because of rounding.

Introduction of a 1.5% Payroll Tax

This is the most burdensome tax change tested for this firm. It would generate a gross tax liability of \$141,997 per \$1,000,000 of total taxes. This would mean that, if introduced, a payroll tax would be the third largest government sector charge this company would face, behind only UIC payments and the federal sales tax. The net tax increase to the firm and the Province would be \$126,023.

Introduction of a Health Insurance Premium

A health insurance premium at Ontario rates (assuming the firm pays 50% of the premiums) would cost the company \$110,853 in total. After the provincial income tax savings are accounted for the net cost is \$98,400. This represents the second largest tax increase for the company.

Extending the 11% Sales Tax to Electricity and Fuel Oil

Extending the sales tax to electricity and fuel oil creates a gross tax liability of \$21,178 and a net tax liability of \$18,796 for Firm G. Only Firm A and Firm D would pay less as the result of extending the sales tax to electricity and fuel oil.

Increasing the Non-Residential Property Tax Rate From 2.25% to 3.00%

This measure would generate a gross tax increase for Firm G of \$26,500 per \$1,000,000 in total taxes. It would save \$2,981 in provincial income taxes resulting in a net tax increase to the firm and the Province of \$23,519.

Reducing the Sales Tax Rate from 11% to 9%

This would cost the Province \$14,016 in sales taxes. It is interesting to note that \$4,331 of this is directly related to the sales tax on telephones. The net tax savings to the firm is \$12,672.

Reducing the Corporate Income Tax Rate to 14% from 15%

In 1985, this measure saves the firm \$9,271 per \$1,000,000 of total taxes paid in the base case.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%) and a 0.3% Capital Tax

The combined tax decrease associated with the sales tax and income tax reductions is more than enough to offset the tax increase resulting from the capital tax. The combined net effect is a tax decrease of \$2,754 per \$1,000,000 of total tax paid.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Tax (14%), a 0.5% Payroll Tax and a 0.1% Capital Tax

The gross impact of a payroll tax is an increase of \$47,332 per \$1,000,000 in total taxes paid and the gross impact of the capital tax is a positive \$7,207. Sales tax is reduced by \$14,016 and income tax is reduced by \$14,063. This results in a net tax increase to the firm of \$26,461 per million dollars of total taxes paid.

Introduction of a 0.5% Payroll Tax and a 0.1% Capital Tax

As indicated above, a 0.5% payroll tax creates an additional gross tax liability for Firm G of \$47,332 and the 0.1% capital tax increases the company's total taxes by \$7,207. Because the firm's taxable income is reduced by a total of \$54,539, it saves \$6,136 in provincial corporate income taxes. The combined effect of these measures is an increased tax liability of \$48,404 per million dollars of total taxes paid.

FIRM H - SAWMILLING INDUSTRY

Base Case

This firm did not pay any federal or provincial corporate income taxes over the 1981 to 1985 period. Therefore, the net effects on the firm and the Province's revenue from any measure are identical to the gross impact on the firm. For this reason any inter-industry comparison of tax impacts will be misleading for this firm.

Provincial taxes accounted for between 35.8% and 51.0% of total taxes paid over the 1981 to 1985 period. In 1985, provincial taxes accounted for 41.4% of all taxes paid by this firm.

Introduction of a 0.3% Corporate Capital Tax

In 1985, the introduction of a 0.3% corporate capital tax would cost this firm \$24,045 per million dollars of total taxes paid.

TABLE 8
FIRM H - SAWMILLING
ASSESSMENT OF TAX IMPACTS BY FIRM - DOLLARS

	1983	1984	1985
A. BASE CASE DATA:			
TOTAL PROVINCIAL TAXES	434,343	358,178	414,343
FEDERAL TAXES	565,657	641,822	585,657
TOTAL TAXES	1,000,000	1,000,000	1,000,000
B. CURRENT TAX SYSTEM IMPACT OF:			
1. Corporate Capital Tax	34,469	17,137	24,045
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	34,469	17,137	24,045
Total Tax	34,469	17,137	24,045
2. Payroll Tax	81,598	41,928	75,712
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	81,598	41,928	75,712
Total Tax	81,598	41,928	75,712
Health Insurance Premiums	61,852	29,351	55,036
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	61,852	29,351	55,036
Total Tax	61,852	29,351	55,036
4. Sales Tax on Electricity and Fuel Oil	49,826	51,950	80,219
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	49,826	51,950	80,219
Total Tax	49,826	51,950	80,219
5. Property Tax Rate to \$3/\$100	6,649	5,336	10,949
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	6,649	5,336	10,949
Total Tax	6,649	5,336	10,949
C. ADJUST SALES TAX TO 9%	(20,432)	(20,144)	(33,549)
Federal Tax	0	0	0
Provincial Tax	0	0	0
Provincial Sales Tax (Telephone)	(1,390)	(1,371)	(2,283)
Net Provincial Tax	(21,822)	(21,514)	(35,832)
Total Tax	(21,822)	(21,514)	(35,832)
D. ADJUST CORPORATE TAX RATE TO 14%	0	0	0
Federal Tax	0	0	0
Provincial Tax	0	0	0
Total Tax	0	0	0
E. SALES TAX AT 9%, CIT AT 14%			
1. With Tested Capital Tax	34,469	17,137	24,045
Sales Tax	(20,432)	(20,144)	(33,549)
Federal Tax	0	0	0
Provincial Tax	0	0	0
Provincial Sales Tax (Telephone)	(1,390)	(1,371)	(2,283)
Net Provincial Tax	12,647	(4,377)	(11,787)
Total Tax	12,647	(4,377)	(11,787)
2. Payroll Tax at 0.5%	27,199	13,977	25,239
Capital Tax at 0.1%	11,490	5,712	8,015
Federal Tax	0	0	0
Provincial Tax	0	0	0
Provincial Sales Tax	(21,822)	(21,514)	(35,832)
Net Provincial Tax	16,867	(1,824)	(2,576)
Total Tax	16,867	(1,824)	(2,576)
F. SALES TAX AT 11%, CIT AT 15%			
Payroll Tax at 0.5%	27,199	13,977	25,239
Capital Tax at 0.1%	11,490	5,712	8,015
Federal Tax	0	0	0
Provincial Tax	0	0	0
Net Provincial Tax	38,688	19,689	33,254
Total Tax	38,688	19,689	33,254

NOTE: Totals may not add exactly because of rounding.

Introduction of a 1.5% Payroll Tax

This tax measure would be the second most burdensome tax change for this particular firm. The firm's tax liability would increase by \$75,712.

Introduction of a Health Insurance Premium

The model tested a health insurance premium at Ontario rates. Since this type of premium is often paid by the employer as a fringe benefit, it was assumed that every firm modelled would pay 50% of the premiums. Given these assumptions, Firm H would face an additional tax liability of \$55,036 per million dollars of total taxes paid in 1985.

Extending the 11% Sales Tax to Electricity and Fuel Oil

Due to the nature of its industry sector, this company uses a relatively large amount of electricity and fuel oil in its production process. Therefore, for this firm, taxing fuel oil and electricity represents the single largest tax increase tested. In 1985, this measure would cost the firm \$80,219 per million dollars of total taxes paid. On a relative basis, this industry is hit hardest by this measure.

Increasing the Non-Residential Property Tax Rate from 2.25% to 3.00%

The property tax increase would cost the firm \$10,949 per million dollars of total taxes. For this company the property tax increase has the smallest impact of any tax change modelled.

Reducing the Sales Tax Rate from 11% to 9%

This measure would save the firm \$35,832 in 1985. The tax savings from this measure would offset the corporate capital tax and the property tax increase combined. It would also substantially offset the tax increase associated with health insurance premiums.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%) and a 0.3% Corporate Capital Tax

Since this firm pays no income tax to either level of government, this is effectively a test of a sales tax decrease and the introduction of a 0.3% capital tax. This firm would pay an additional \$24,045 in taxes due to the capital tax. However, the sales tax reduction to 9% would save it \$35,832. Therefore, the net tax saving for this firm in 1985 would be \$11,787 per million dollars in total taxes paid.

Combination of a Reduced Sales Tax (9%), a Reduced Corporate Income Tax (14%), a 0.5% Payroll Tax and a 0.1% Capital Tax

Because this firm paid no corporate income taxes over the period modelled, this is effectively a test of the impact of a sales tax reduction and the introduction of a payroll tax and capital tax at low rates. The 0.5% payroll tax would cost this firm \$25,239 and the capital tax at 0.1% would cost \$8,015. The sales tax reduction of \$35,832 more than offsets the combined tax increase. Therefore, the net impact is a tax reduction of \$2,574 in 1985.

Introduction of a 0.5% Payroll Tax and a 0.1% Capital Tax

The payroll tax at 0.5% would generate an additional tax liability of \$25,239 per \$1,000,000 of total taxes paid. The capital tax at 0.1% would cost the firm \$8,015. The combined impact is a tax increase to the firm of \$33,254.

APPENDIX I

CONFIDENTIAL SURVEY

COOPERS & LYBRAND CONSULTING GROUP

ECONOMICS PRACTICE

NEW BRUNSWICK TAX STUDY

FIRM: _____

CONTACT: _____

PHONE #: _____

FISCAL YEAR

STARTING: _____

ENDING: _____

CONFIDENTIAL SURVEY

ITEMS

1980-81 1981-82 1982-83 1983-84 1984-85

A. INCOME STATEMENT (\$M)

1. Net Sales
2. Cost of Goods or Services Sold
3. Gross Profit on Sales (Row 1-Row 2)
4. Selling Expense
5. General and Administrative Expense
6. Income from Operations (Row 3 minus Row 4 minus Row 5)

Other Income and Expenses

7. Dividend Income
8. Rental Income
9. Interest Income
10. Unusual Charges or Gains (Inc. Sales of Assets)
11. Interest Expense - Short Term Loans
12. Interest Expense - Long Term Debt
13. Income from Continuing Operations Before Taxes
(Row 6 plus Rows 7 to 10 minus Rows 11 to 12)
14. Current Income Taxes - Federal
15. Current Income Taxes - Provincial
16. Deferred Income Taxes
17. Royalties Paid
18. After Tax Income (Row 13 minus Row 14 to Row 17)
19. Extraordinary Items and/or Discontinued Operations
20. Net Income (Row 18 - Row 19)
21. Dividends Paid
22. Retained Earnings (Row 20 - Row 21)

B. BALANCE SHEET (\$M)

ASSETS

Current Assets

23. Cash and Short Term Deposits
24. Marketable Securities
25. Account Receivable
26. Inventories
27. Other Current Assets
28. Total Current Assets

Fixed Assets

29. Net Plant and Equipment (Operational Fixed Assets)
30. Net Properties and Development Expenditures (Non-Operational)
31. Other Assets
32. Total Assets

ITEMS	1980-81	1981-82	1982-83	1983-84	1984-85
LIABILITIES					
Current Liabilities					
33. Current Portion of Long-Term Debt					
34. Accounts Payable					
35. Notes Payable - Short Term Debt					
36. Accrued Payroll, Commissions and Employee Benefits					
37. Accrued Federal Income Taxes					
38. Accrued Provincial Income Taxes .					
39. Other Liabilities					
40. Total Current Liabilities (Sum Rows 33 to 39)					
41. Long-Term Debt, Net					
42. Deferred Income Taxes					
43. Capital Stock					
44. Retained Earnings (Accumulated Deficit)					
45. Contributed Surplus					
46. Total Shareholders Equity (Sum Rows 43 to 45)					
47. Total Liabilities and Shareholders Equity (Row 40 plus Row 41 plus Row 42 plus Row 46)					

C. STATEMENT OF CHANGE IN FINANCIAL POSITION (\$M)

Source of Working Capital

- 48. Net Income (Loss) After Taxes
- 49. Depreciation and Amortization
- 50. Working Capital Provided from Operations for Period
- 51. Increase in Long-Term Debt
- 52. Stock Issues
- 53. Total Sources of Working Capital

Use of Funds

- 54. Reduction of Long-Term Debt
- 55. Additions to Plant and Equipment - Net
- 56. Dividend Payments
- 57. Increase in Other Assets
- 58. Total Uses of Net Working Capital
- 59. Increase (Decrease) in Working Capital

D. EMPLOYMENT

Employment Levels (Number of Employees)

- 60. Payroll (Production) Employees
- 61. Staff Employees - Sales
- 62. Staff Employees - Administration

Employee Remuneration (\$)

- 63. Average Hourly Wages (Excluding Benefits) per Payroll Employee
- 64. Average Hourly Wages (Excluding Benefits) per Staff Employee - Sales
- 65. Average Hourly Wages (Excluding Benefits) per Staff Employee - Admin.

ITEMS

1980-81 1981-82 1982-83 1983-84 1984-85

Employee Benefits

- 66. Average Hourly Benefits per Payroll Employee
- 67. Average Hourly Benefits per Staff Employee - Sales
- 68. Average Hourly Benefits per Staff Employee - Admin.

Employee Hours

- 69. Average Hours Worked per Week per Payroll Employee
- 70. Average Hours Worked per Week per Staff Employee - Sales
- 71. Average Hours Worked per Week per Staff Employee - Admin.

Employee Training

- 72. Average Training Expenses per Payroll Employee Per Year
- 73. Average Training Expenses per Staff Employee - Sales per Year
- 74. Average Training Expenses per Staff Employee - Admin. per year

E. CAPITAL CONSUMPTION ALLOWANCE

Buildings

- 75. Class 3 or 31 - Buildings in General
- 76. Class 6 or 32 - Buildings Before 1978/Farming & Fishing Activities
- 77. Annual Depreciation - Buildings (___ Year Basis)

Machinery and Equipment

- 78. Class 8 - Office Furniture and Equipment
- 79. Class 18 - Computer Equipment & System Software
- 80. Class 12 - Computer Application Software
- 81. Class 12 - Tools Costing (\$200/Welds, Dies, etc.)
- 82. Class 29 - Machinery & Equipment Used in Manufacturing and Processing
- 83. Class 34 - Energy Conservation Equipment
- 84. Annual Depreciation - Machinery and Equipment (___ Year Basis)

Transportation Equipment

- 85. Class 7 - Ships
- 86. Class 9 - Aircraft
- 87. Class 10 - Trucks, Automobiles, Lift Trucks
- 88. Annual Depreciation - Transportation Equipment (___ Year Basis)

Other Categories

- 89. Class 13 - Leaseholds
- 90. Annual Depreciation - Leaseholds (___ Year Basis)
- 91. Class 17 - Roads/Parking Areas/Storage Areas, etc.
- 92. Annual Depreciation - Roads/Parking, Etc. (___ Year Basis)

ITEMS

1980-81 1981-82 1982-83 1983-84 1984-85

F. INVESTMENT TAX CREDITS

- 93. Investment Tax Credits Available During Year - Pre-1983
- 94. Investment Tax credits Used During Year - Pre 1983
- 95. Investment Tax Credits Available During Year - Post 1983
- 96. Investment Tax Credits Used During Year - Post 1983

G. PROPERTY TAXES

Buildings, Machinery and Equipment

- 97. Property Assessed Values (attach list)
- 98. Business Municipal Tax Rate.

H. ENERGY/COMMUNICATION COSTS

- 99. Gasoline - On Road
- 100. Gasoline - Off Road
- 101. Diesel - On Road
- 102. Diesel - Off Road
- 103. Heating Oil
- 104. Electricity
- 105. Telephone Costs

I. BORROWING

- 106. Existing Loans - Long- Term Private (@__% Per Year)
- 107. Existing Loans - Long-Term Provincial (@__% Per Year)
- 108. Existing Loans - Long Term Federal (@__% Per Year)
- 109. New Loans - Long Term Private (@__% Per Year)
- 110. New Loans - Long Term Provincial (@__% Per Year)
- 111. New Loans - Long Term Federal (@__% Per Year)
- 112. Grants - Provincial Government
- 113. Grants - Federal Government

J. ROYALTIES

- 114. Royalties Paid to _____ for _____
- 115. Royalties Paid to _____ for _____

K. MISCELLANEOUS

- 116. Value of Consumables Used in Manufacturing Process (Estimate)
- 117. Value of Labour Content of Outside Repair (Estimate)
- 118. Value of Taxable Building Materials Purchased (Estimate)